

NOTE: This PDN is intended for use exclusively in EUROPE, Middle East and Africa. Additionally, the listed products are only a part of complete range.

Product Discontinuation

Recommended Replacement

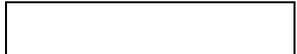
MOSFET Relay

MOSFET Relay

- G3VM-101HR
- G3VM-101HR(TR)
- G3VM-101HR1
- G3VM-101HR1(TR05)
- G3VM-101LR
- G3VM-101LR(TR05)
- G3VM-21HR
- G3VM-21HR(TR)
- G3VM-21LR
- G3VM-21LR(TR05)
- G3VM-21LR1
- G3VM-21LR1(TR05)
- G3VM-21LR10
- G3VM-21LR10(TR05)
- G3VM-21LR11
- G3VM-21LR11(TR05)
- G3VM-31HR
- G3VM-31HR(TR05)
- G3VM-41GR8
- G3VM-41GR8(TR)
- G3VM-41HR
- G3VM-41HR(TR)
- G3VM-41LR10
- G3VM-41LR10(TR05)
- G3VM-41LR11
- G3VM-41LR11(TR05)
- G3VM-41LR4
- G3VM-41LR4(TR05)
- G3VM-41LR5
- G3VM-41LR5(TR05)
- G3VM-41LR6



- G3VM-101HR2
- G3VM-101HR2(TR)
- G3VM-101HR2
- G3VM-101HR2(TR05)
- G3VM-101UR
- G3VM-101UR(TR05)
- G3VM-31HR1
- G3VM-31HR1(TR05)
- G3VM-21UR10
- G3VM-21UR10(TR05)
- G3VM-21UR1
- G3VM-21UR1(TR05)
- G3VM-21UR10
- G3VM-21UR10(TR05)
- G3VM-21UR11
- G3VM-21UR11(TR05)
- G3VM-31HR1
- G3VM-31HR1(TR05)
- G3VM-61VR
- G3VM-61VR(TR)
- G3VM-61HR2
- G3VM-61HR2(TR05)
- G3VM-41UR10
- G3VM-41UR10(TR05)
- G3VM-41UR11
- G3VM-41UR11(TR05)
- G3VM-41UR4
- G3VM-41UR4(TR05)
- G3VM-41UR12
- G3VM-41UR12(TR05)
- G3VM-41UR12



G3VM-41LR6(TR05)	G3VM-41UR12(TR05)
G3VM-61HR	G3VM-61HR2
G3VM-61HR(TR)	G3VM-61HR2(TR05)
G3VM-61HR1	G3VM-61HR2
G3VM-61HR1(TR05)	G3VM-61HR2(TR05)
G3VM-61LR	G3VM-61UR
G3VM-61LR(TR05)	G3VM-61UR(TR05)
G3VM-81HR	G3VM-101HR2
G3VM-81HR(TR)	G3VM-101HR2(TR)
G3VM-81LR	G3VM-81UR
G3VM-81LR(TR05)	G3VM-81UR(TR05)

[Final order entry date]

The end of March, 2027

[Date of The Last Shipping]

The end of June, 2027

[Caution on recommended replacement]

Some products differ in body color, dimensions and mounting dimensions, but wire connection, characteristics, operation ratings and operation methods are almost compatible.

[Difference from discontinued product]

Product discontinuation	Recommended replacement Model	Body Color	Dimensions	Mounting Dimensions	Characteristics / Operation ratings	Wire connection/ Operation methods
G3VM-101HR	G3VM-101HR2	**	**	**	*	**
G3VM-101HR(TR)	G3VM-101HR2(TR)	**	**	**	*	**
G3VM-101HR1	G3VM-101HR2	**	**	**	*	**
G3VM-101HR1(TR05)	G3VM-101HR2(TR05)	**	**	**	*	**
G3VM-101LR	G3VM-101UR	--	--	--	*	**
G3VM-101LR(TR05)	G3VM-101UR(TR05)	--	--	--	*	**
G3VM-21HR	G3VM-31HR1	**	**	**	*	**
G3VM-21HR(TR)	G3VM-31HR1(TR05)	**	**	**	*	**
G3VM-21LR	G3VM-21UR10	--	--	--	*	**
G3VM-21LR(TR05)	G3VM-21UR10(TR05)	--	--	--	*	**
G3VM-21LR1	G3VM-21UR1	--	--	--	*	**
G3VM-21LR1(TR05)	G3VM-21UR1(TR05)	--	--	--	*	**
G3VM-21LR10	G3VM-21UR10	--	--	--	*	**
G3VM-21LR10(TR05)	G3VM-21UR10(TR05)	--	--	--	*	**
G3VM-21LR11	G3VM-21UR11	--	--	--	*	**
G3VM-21LR11(TR05)	G3VM-21UR11(TR05)	--	--	--	*	**
G3VM-31HR	G3VM-31HR1	**	**	**	*	**
G3VM-31HR(TR05)	G3VM-31HR1(TR05)	**	**	**	*	**
G3VM-41GR8	G3VM-61VR	--	*	**	*	**
G3VM-41GR8(TR)	G3VM-61VR(TR)	--	*	**	*	**
G3VM-41HR	G3VM-61HR2	**	**	**	*	**
G3VM-41HR(TR)	G3VM-61HR2(TR05)	**	**	**	*	**

G3VM-41LR10	G3VM-41UR10	--	--	--	*	**
G3VM-41LR10(TR05)	G3VM-41UR10(TR05)	--	--	--	*	**
G3VM-41LR11	G3VM-41UR11	--	--	--	*	**
G3VM-41LR11(TR05)	G3VM-41UR11(TR05)	--	--	--	*	**

Product discontinuation	Recommended replacement Model	Body Color	Dimensions	Mounting Dimensions	Characteristics / Operation ratings	Wire connection/ Operation methods
G3VM-41LR4	G3VM-41UR4	--	--	--	*	**
G3VM-41LR4(TR05)	G3VM-41UR4(TR05)	--	--	--	*	**
G3VM-41LR5	G3VM-41UR12	--	--	--	*	**
G3VM-41LR5(TR05)	G3VM-41UR12(TR05)	--	--	--	*	**
G3VM-41LR6	G3VM-41UR12	--	--	--	*	**
G3VM-41LR6(TR05)	G3VM-41UR12(TR05)	--	--	--	*	**
G3VM-61HR	G3VM-61HR2	**	**	**	*	**
G3VM-61HR(TR)	G3VM-61HR2(TR05)	**	**	**	*	**
G3VM-61HR1	G3VM-61HR2	**	**	**	*	**
G3VM-61HR1(TR05)	G3VM-61HR2(TR05)	**	**	**	*	**
G3VM-61LR	G3VM-61UR	--	--	--	*	**
G3VM-61LR(TR05)	G3VM-61UR(TR05)	--	--	--	*	**
G3VM-81HR	G3VM-101HR2	**	**	**	*	**
G3VM-81HR(TR)	G3VM-101HR2(TR)	**	**	**	*	**
G3VM-81LR	G3VM-81UR	--	--	--	*	**
G3VM-81LR(TR05)	G3VM-81UR(TR05)	--	--	--	*	**

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
G3VM-101HR	G3VM-101HR2
G3VM-101HR(TR)	G3VM-101HR2(TR)
G3VM-101HR1	G3VM-101HR2
G3VM-101HR1(TR05)	G3VM-101HR2(TR05)
G3VM-101LR	G3VM-101UR
G3VM-101LR(TR05)	G3VM-101UR(TR05)
G3VM-21HR	G3VM-31HR1
G3VM-21HR(TR)	G3VM-31HR1(TR05)
G3VM-21LR	G3VM-21UR10
G3VM-21LR(TR05)	G3VM-21UR10(TR05)
G3VM-21LR1	G3VM-21UR1
G3VM-21LR1(TR05)	G3VM-21UR1(TR05)
G3VM-21LR10	G3VM-21UR10
G3VM-21LR10(TR05)	G3VM-21UR10(TR05)
G3VM-21LR11	G3VM-21UR11
G3VM-21LR11(TR05)	G3VM-21UR11(TR05)
G3VM-31HR	G3VM-31HR1
G3VM-31HR(TR05)	G3VM-31HR1(TR05)

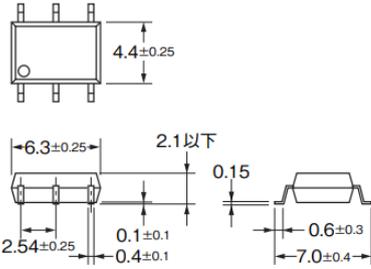
Product discontinuation	Recommended replacement
G3VM-41GR8	G3VM-61VR
G3VM-41GR8(TR)	G3VM-61VR(TR)
G3VM-41HR	G3VM-61HR2
G3VM-41HR(TR)	G3VM-61HR2(TR05)
G3VM-41LR10	G3VM-41UR10
G3VM-41LR10(TR05)	G3VM-41UR10(TR05)
G3VM-41LR11	G3VM-41UR11
G3VM-41LR11(TR05)	G3VM-41UR11(TR05)
G3VM-41LR4	G3VM-41UR4
G3VM-41LR4(TR05)	G3VM-41UR4(TR05)
G3VM-41LR5	G3VM-41UR12
G3VM-41LR5(TR05)	G3VM-41UR12(TR05)
G3VM-41LR6	G3VM-41UR12
G3VM-41LR6(TR05)	G3VM-41UR12(TR05)
G3VM-61HR	G3VM-61HR2
G3VM-61HR(TR)	G3VM-61HR2(TR05)
G3VM-61HR1	G3VM-61HR2
G3VM-61HR1(TR05)	G3VM-61HR2(TR05)
G3VM-61LR	G3VM-61UR
G3VM-61LR(TR05)	G3VM-61UR(TR05)
G3VM-81HR	G3VM-101HR2
G3VM-81HR(TR)	G3VM-101HR2(TR)
G3VM-81LR	G3VM-81UR
G3VM-81LR(TR05)	G3VM-81UR(TR05)

[Body color]

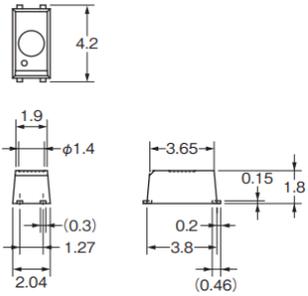
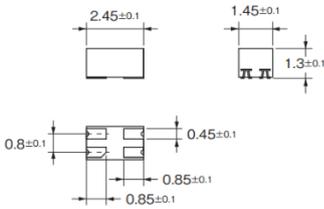
Product discontinuation	Recommendable replacement
G3VM-101HR G3VM-101HR(TR) G3VM-101HR1 G3VM-101HR1(TR05) G3VM-21HR G3VM-21HR(TR) G3VM-31HR G3VM-31HR(TR05) G3VM-41HR G3VM-41HR(TR) G3VM-61HR G3VM-61HR(TR) G3VM-61HR1 G3VM-61HR1(TR05) G3VM-81HR G3VM-81HR(TR)	G3VM-101HR2 G3VM-101HR2(TR) G3VM-101HR2 G3VM-101HR2(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-101HR2 G3VM-101HR2(TR)
White	White

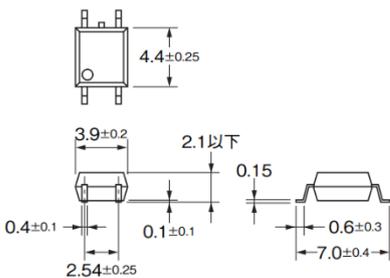
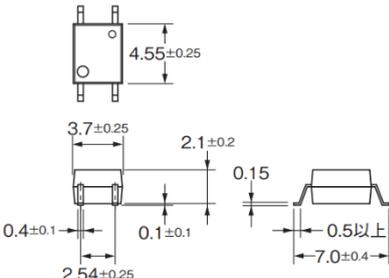
Product discontinuation	Recommendable replacement
G3VM-101LR G3VM-101LR(TR05) G3VM-21LR G3VM-21LR(TR05) G3VM-21LR1 G3VM-21LR1(TR05) G3VM-21LR10 G3VM-21LR10(TR05) G3VM-21LR11 G3VM-21LR11(TR05) G3VM-41GR8 G3VM-41GR8(TR) G3VM-41LR10 G3VM-41LR10(TR05) G3VM-41LR11 G3VM-41LR11(TR05) G3VM-41LR4 G3VM-41LR4(TR05) G3VM-41LR5 G3VM-41LR5(TR05) G3VM-41LR6 G3VM-41LR6(TR05) G3VM-61LR G3VM-61LR(TR05) G3VM-81LR G3VM-81LR(TR05)	G3VM-101UR G3VM-101UR(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR1 G3VM-21UR1(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR11 G3VM-21UR11(TR05) G3VM-61VR G3VM-61VR(TR) G3VM-41UR10 G3VM-41UR10(TR05) G3VM-41UR11 G3VM-41UR11(TR05) G3VM-41UR4 G3VM-41UR4(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-61UR G3VM-61UR(TR05) G3VM-81UR G3VM-81UR(TR05)
White	Black

[Dimensions]

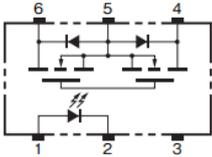
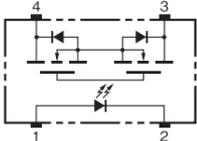
Product discontinuation	Recommendable replacement
<p>G3VM-101HR G3VM-101HR(TR) G3VM-101HR1 G3VM-101HR1(TR05) G3VM-21HR G3VM-21HR(TR) G3VM-31HR G3VM-31HR(TR05) G3VM-41HR G3VM-41HR(TR) G3VM-61HR G3VM-61HR(TR) G3VM-61HR1 G3VM-61HR1(TR05) G3VM-81HR G3VM-81HR(TR)</p>	<p>G3VM-101HR2 G3VM-101HR2(TR) G3VM-101HR2 G3VM-101HR2(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-101HR2 G3VM-101HR2(TR)</p>
 <p>Technical drawings of a component showing dimensions:</p> <ul style="list-style-type: none"> Top view: 4.4 ± 0.25 Side view: 6.3 ± 0.25, 2.54 ± 0.25, 0.1 ± 0.1, 0.4 ± 0.1, 2.1 以下 Cross-sectional view: 0.15, 0.6 ± 0.3, 7.0 ± 0.4 	<p>Same as left</p>

[Dimensions]

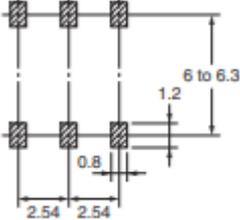
Product discontinuation	Recommendable replacement
<p>G3VM-101LR G3VM-101LR(TR05) G3VM-21LR G3VM-21LR(TR05) G3VM-21LR1 G3VM-21LR1(TR05) G3VM-21LR10 G3VM-21LR10(TR05) G3VM-21LR11 G3VM-21LR11(TR05) G3VM-41LR10 G3VM-41LR10(TR05) G3VM-41LR11 G3VM-41LR11(TR05) G3VM-41LR4 G3VM-41LR4(TR05) G3VM-41LR5 G3VM-41LR5(TR05) G3VM-41LR6 G3VM-41LR6(TR05) G3VM-61LR G3VM-61LR(TR05) G3VM-81LR G3VM-81LR(TR05)</p>	<p>G3VM-101UR G3VM-101UR(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR1 G3VM-21UR1(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR11 G3VM-21UR11(TR05) G3VM-41UR10 G3VM-41UR10(TR05) G3VM-41UR11 G3VM-41UR11(TR05) G3VM-41UR4 G3VM-41UR4(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-61UR G3VM-61UR(TR05) G3VM-81UR G3VM-81UR(TR05)</p>
	

Product discontinuation	Recommendable replacement
<p>G3VM-41GR8 G3VM-41GR8(TR)</p>	<p>G3VM-61VR G3VM-61VR(TR)</p>
	

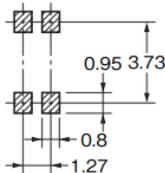
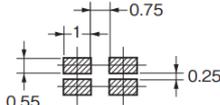
[Wire connection]

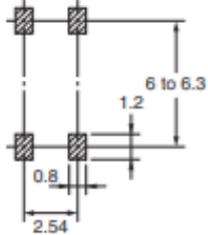
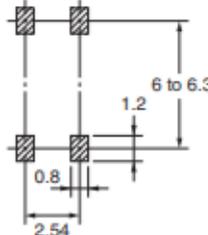
Product discontinuation	Recommendable replacement
<p>G3VM-101HR G3VM-101HR(TR) G3VM-101HR1 G3VM-101HR1(TR05) G3VM-21HR G3VM-21HR(TR) G3VM-31HR G3VM-31HR(TR05) G3VM-41HR G3VM-41HR(TR) G3VM-61HR G3VM-61HR(TR) G3VM-61HR1 G3VM-61HR1(TR05) G3VM-81HR G3VM-81HR(TR)</p>	<p>G3VM-101HR2 G3VM-101HR2(TR) G3VM-101HR2 G3VM-101HR2(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-101HR2 G3VM-101HR2(TR)</p>
	<p>Same as left</p>
<p>G3VM-101LR G3VM-101LR(TR05) G3VM-21LR G3VM-21LR(TR05) G3VM-21LR1 G3VM-21LR1(TR05) G3VM-21LR10 G3VM-21LR10(TR05) G3VM-21LR11 G3VM-21LR11(TR05) G3VM-41GR8 G3VM-41GR8(TR) G3VM-41LR10 G3VM-41LR10(TR05) G3VM-41LR11 G3VM-41LR11(TR05) G3VM-41LR4 G3VM-41LR4(TR05) G3VM-41LR5 G3VM-41LR5(TR05) G3VM-41LR6 G3VM-41LR6(TR05) G3VM-61LR G3VM-61LR(TR05) G3VM-81LR G3VM-81LR(TR05)</p>	<p>G3VM-101UR G3VM-101UR(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR1 G3VM-21UR1(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR11 G3VM-21UR11(TR05) G3VM-61VR G3VM-61VR(TR) G3VM-41UR10 G3VM-41UR10(TR05) G3VM-41UR11 G3VM-41UR11(TR05) G3VM-41UR4 G3VM-41UR4(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-61UR G3VM-61UR(TR05) G3VM-81UR G3VM-81UR(TR05)</p>
	<p>Same as left</p>

[Mounting dimensions]

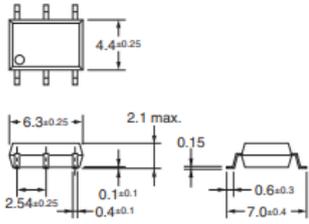
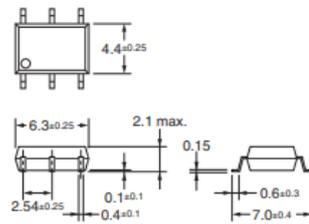
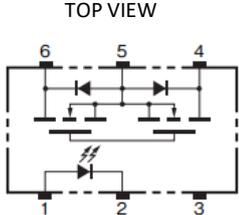
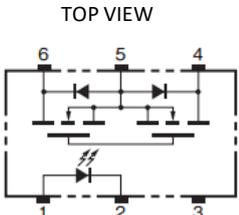
Product discontinuation	Recommendable replacement
<p>G3VM-101HR G3VM-101HR(TR) G3VM-101HR1 G3VM-101HR1(TR05) G3VM-21HR G3VM-21HR(TR) G3VM-31HR G3VM-31HR(TR05) G3VM-41HR G3VM-41HR(TR) G3VM-61HR G3VM-61HR(TR) G3VM-61HR1 G3VM-61HR1(TR05) G3VM-81HR G3VM-81HR(TR)</p>	<p>G3VM-101HR2 G3VM-101HR2(TR) G3VM-101HR2 G3VM-101HR2(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-31HR1 G3VM-31HR1(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-61HR2 G3VM-61HR2(TR05) G3VM-101HR2 G3VM-101HR2(TR)</p>
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[Mounting dimensions]

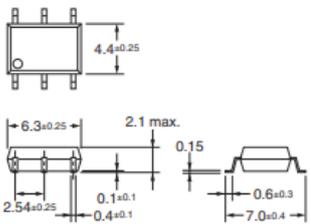
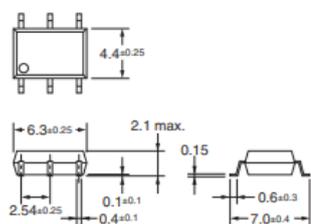
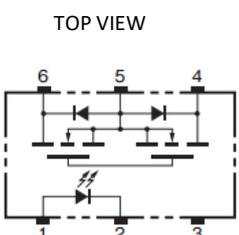
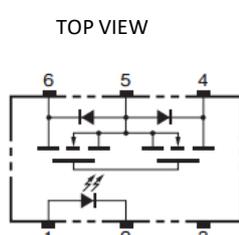
Product discontinuation	Recommendable replacement
<p>G3VM-101LR G3VM-101LR(TR05) G3VM-21LR G3VM-21LR(TR05) G3VM-21LR1 G3VM-21LR1(TR05) G3VM-21LR10 G3VM-21LR10(TR05) G3VM-21LR11 G3VM-21LR11(TR05) G3VM-41LR10 G3VM-41LR10(TR05) G3VM-41LR11 G3VM-41LR11(TR05) G3VM-41LR4 G3VM-41LR4(TR05) G3VM-41LR5 G3VM-41LR5(TR05) G3VM-41LR6 G3VM-41LR6(TR05) G3VM-61LR G3VM-61LR(TR05) G3VM-81LR G3VM-81LR(TR05)</p>	<p>G3VM-101UR G3VM-101UR(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR1 G3VM-21UR1(TR05) G3VM-21UR10 G3VM-21UR10(TR05) G3VM-21UR11 G3VM-21UR11(TR05) G3VM-41UR10 G3VM-41UR10(TR05) G3VM-41UR11 G3VM-41UR11(TR05) G3VM-41UR4 G3VM-41UR4(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-41UR12 G3VM-41UR12(TR05) G3VM-61UR G3VM-61UR(TR05) G3VM-81UR G3VM-81UR(TR05)</p>
	

Product discontinuation	Recommendable replacement
<p>G3VM-41GR8 G3VM-41GR8(TR)</p>	<p>G3VM-61VR G3VM-61VR(TR)</p>
	

[Characteristics / Operation ratings]

Item	Product Discontinuation			Recommended Replacement						
	G3VM-101HR G3VM-101HR(TR)			G3VM-101HR2 G3VM-101HR2(TR)						
Type										
Package		SOP6			SOP6					
Contact form		1a(SPST-NO)			1a(SPST-NO)					
Terminal structure		Surface-mounting Terminals			Surface-mounting Terminals					
Absolute maximum Rating		Symbol	Unit	Rating		Rating				
Input	LED forward current	I_F	mA	30		30				
	LED reverse voltage	V_R	V	5		6				
Output	Load Voltage(AC/DC)	V_{OFF}	V	100		100				
	Continuous load current	Connection A	I_O	A	1.4		3			
		Connection B			2.8		6			
Connection C										
Dielectric strength between input and output		V_{LO}	Vrms	1,500		1,500				
Operating Temperature		T_a	°C	-40	~	+ 85	-40	~	+ 110	
Storage Temperature		T_{stg}	°C	-55	~	+ 125	-55	~	+ 125	
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max	
Input	LED Forward voltage	V_F	V	1.18	1.33	1.48	1.5	1.65	1.8	
	Trigger LED Forward Current	I_{FT}	mA	-	0.4	3	-	0.35	3	
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-	
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.1	0.2	-	0.05	0.065
		Connection B			-	0.05	0.1	-	0.025	0.033
		Connection C			-	0.025	-	-	0.013	0.016
Current leakage when the relay is open		I_{LEAK}	nA	-	-	10	-	-	1000	
Capacitance between terminals		C_{OFF}	pF	-	1000	-	-	460	-	
Capacitance between I/O terminals		C_{LO}	pF	-	0.8	-	-	0.8	-	
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-	
Turn-ON time		t_{ON}	ms	-	1	5	-	0.45	2	
Turn-OFF time		t_{OFF}	ms	-	0.15	1	-	0.1	0.5	
Approved standards		UL			UL					
Dimensions										
Terminal arrangement /Internal connections										

[Characteristics / Operation ratings]

Item	Product Discontinuation			Recommended Replacement						
	G3VM-101HR1 G3VM-101HR1(TR05)			G3VM-101HR2 G3VM-101HR2(TR05)						
Type										
Package		SOP6			SOP6					
Contact form		1a(SPST-NO)			1a(SPST-NO)					
Terminal structure		Surface-mounting Terminals			Surface-mounting Terminals					
Absolute maximum Rating		Symbol	Unit	Rating		Rating				
Input	LED forward current	I_F	mA	30		30				
	LED reverse voltage	V_R	V	5		6				
Output	Load Voltage(AC/DC)	V_{OFF}	V	100		100				
	Continuous load current	Connection A	I_O	A	2.0		3			
		Connection B			4.0		6			
Connection C										
Dielectric strength between input and output		V_{i-o}	Vrms	1,500		1,500				
Operating Temperature		T_a	°C	-40	~	+ 85	-40	~	+ 110	
Storage Temperature		T_{stg}	°C	-55	~	+ 125	-55	~	+ 125	
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max	
Input	LED Forward voltage	V_F	V	1.18	1.33	1.48	1.5	1.65	1.8	
	Trigger LED Forward Current	I_{FT}	mA	-	0.4	3	-	0.35	3	
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-	
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.045	0.07	-	0.05	0.065
		Connection B			-	0.022	0.035	-	0.025	0.033
		Connection C			-	0.011	0.018	-	0.013	0.016
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1000	-	-	1000	
Capacitance between terminals		C_{OFF}	pF	-	500	-	-	460	-	
Capacitance between I/O terminals		C_{i-o}	pF	-	0.8	-	-	0.8	-	
Insulation resistance between I/O terminals		R_{i-o}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-	
Turn-ON time		t_{ON}	ms	-	1.1	5	-	0.45	2	
Turn-OFF time		t_{OFF}	ms	-	0.1	1	-	0.1	0.5	
Approved standards		UL			UL					
Dimensions										
Terminal arrangement /Internal connections										

[Characteristics / Operation ratings]

Item	Product Discontinuation			Recommended Replacement					
	G3VM-101LR G3VM-101LR(TR05)			G3VM-101UR G3VM-101UR(TR05)					
Type									
Package		SSOP4			VSON4				
Contact form		1a(SPST-NO)			1a(SPST-NO)				
Terminal structure		Surface-mounting Terminals			Surface-mounting Terminals				
Absolute maximum Rating		Symbol	Unit	Rating		Rating			
Input	LED forward current	I_F	mA	50		30			
	LED reverse voltage	V_R	V	5		5			
Output	Load Voltage(AC/DC)	V_{OFF}	V	100		100			
	Continuous load current	I_O	mA	80		100			
Dielectric strength between input and output		V_{FO}	Vrms	1,500		500			
Operating Temperature		T_a	°C	-20	~ + 85	-40 ~ + 110			
Storage Temperature		T_{stg}	°C	-40	~ + 125	-40 ~ + 125			
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.22	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	1	5	-	-	3
	Release LED Forward Current	I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	8	14	-	8	14
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	0.2	-	-	0.2
	Capacitance between terminals	C_{OFF}	pF	-	6	8	-	6	8
Capacitance between I/O terminals		C_{FO}	pF	-	0.6	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.1	0.3	-	-	0.3
Turn-OFF time		t_{OFF}	ms	-	0.1	0.3	-	-	0.3
Approved standards		UL			-				
Dimensions									
Terminal arrangement /Internal connections									

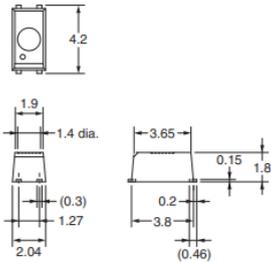
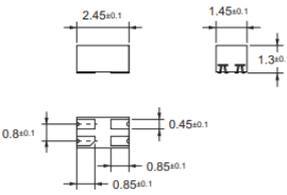
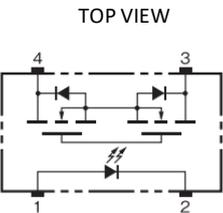
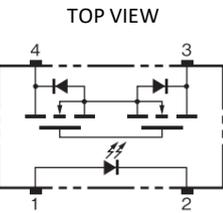
[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement		
			G3VM-21HR G3VM-21HR(TR)			G3VM-31HR1 G3VM-31HR1(TR05)		
Type								
Package			SOP6			SOP6		
Contact form			1a(SPST-NO)			1a(SPST-NO)		
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals		
Absolute maximum Rating			Symbol	Unit	Rating		Rating	
Input	LED forward current		I_F	mA	30		30	
	LED reverse voltage		V_R	V	5		6	
Output	Load Voltage(AC/DC)		V_{OFF}	V	20		30	
	Continuous load current	Connection A	I_O	A	2.5		4.5	
		Connection B			5.0		9	
Connection C								
Dielectric strength between input and output			V_{iO}	Vrms	1,500		1,500	
Operating Temperature			T_a	°C	-40	~	+ 85	-40 ~ + 110
Storage Temperature			T_{stg}	°C	-55	~	+ 125	-55 ~ + 125
Electrical Characteristics			Symbol	Unit	Min.	Typ.	Max	Min. Typ. Max
Input	LED Forward voltage		V_F	V	1.18	1.33	1.48	1.5 1.65 1.8
	Trigger LED Forward Current		I_{FT}	mA	-	-	3	- 0.3 3
	Release LED Forward Current		I_{FC}	mA	0.1	-	-	0.1 - -
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.02	0.05	- 0.022 0.03
		Connection B			-	0.01	0.025	- 0.011 0.015
		Connection C			-	0.005	-	- 0.006 0.008
Current leakage when the relay is open		I_{LEAK}	nA	-	-	10	- - 1000	
Capacitance between terminals		C_{OFF}	pF	-	1000	-	- 1200 -	
Capacitance between I/O terminals			C_{iO}	pF	-	0.8	-	- 0.8 -
Insulation resistance between I/O terminals			R_{iO}	M Ω	1000	1.00E+08	-	1000 1.00E+08 -
Turn-ON time			t_{ON}	ms	-	1.5	5	- 0.6 2
Turn-OFF time			t_{OFF}	ms	-	0.1	1	- 0.15 0.5
Approved standards			UL			UL		
Dimensions								
Terminal arrangement /Internal connections			<p>TOP VIEW</p>			<p>TOP VIEW</p>		

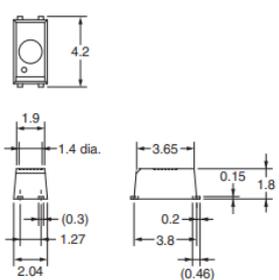
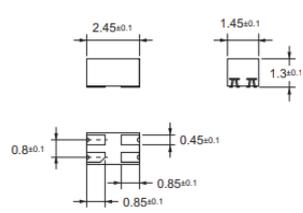
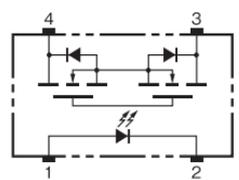
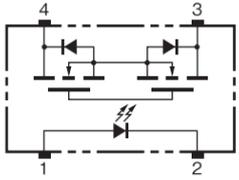
[Characteristics / Operation ratings]

Item				Product Discontinuation			Recommended Replacement				
				G3VM-21LR G3VM-21LR(TR05)			G3VM-21UR10 G3VM-21UR10(TR05)				
Type											
Package				SSOP4			VSON4				
Contact form				1a(SPST-NO)			1a(SPST-NO)				
Terminal structure				Surface-mounting Terminals			Surface-mounting Terminals				
Absolute maximum Rating				Symbol	Unit	Rating		Rating			
Input	LED forward current			I_F	mA	50		30			
	LED reverse voltage			V_R	V	5		5			
Output	Load Voltage(AC/DC)			V_{OFF}	V	20		20			
	Continuous load current			I_O	mA	160		200			
Dielectric strength between input and output				V_{LO}	Vrms	1,500		500			
Operating Temperature				T_a	°C	-20	~	+ 85	-40	~ + 110	
Storage Temperature				T_{stg}	°C	-40	~	+ 125	-40	~ + 125	
Electrical Characteristics				Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage			V_F	V	1	1.15	1.3	1.1	1.22	1.4
	Trigger LED Forward Current			I_{FT}	mA	-	-	4	-	0.9	3
	Release LED Forward Current			I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON			R_{ON}	Ω	-	5	8	-	3	5
	Current leakage when the relay is open			I_{LEAK}	nA	-	-	1	-	-	1
	Capacitance between terminals			C_{OFF}	pF	-	1	2.5	-	0.8	1.1
Capacitance between I/O terminals				C_{LO}	pF	-	0.8	-	-	1	-
Insulation resistance between I/O terminals				R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time				t_{ON}	ms	-	0.06	0.5	-	0.05	0.2
Turn-OFF time				t_{OFF}	ms	-	0.12	0.5	-	0.02	0.2
Approved standards				UL			-				
Dimensions											
Terminal arrangement /Internal connections											

[Characteristics / Operation ratings]

Item		Product Discontinuation				Recommended Replacement			
		G3VM-21LR1 G3VM-21LR1(TR05)				G3VM-21UR1 G3VM-21UR1(TR05)			
Type									
Package		SSOP4				VSON4			
Contact form		1a(SPST-NO)				1a(SPST-NO)			
Terminal structure		Surface-mounting Terminals				Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	50			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	20			20		
	Continuous load current	I_O	mA	450			450		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.22	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	4	-	0.6	3
	Release LED Forward Current	I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	0.8	1.2	-	0.8	1.2
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	5	12	-	5	12
Capacitance between I/O terminals		C_{LO}	pF	-	0.8	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.2	0.5	-	0.17	0.4
Turn-OFF time		t_{OFF}	ms	-	0.2	0.5	-	0.03	0.4
Approved standards		UL				-			
Dimensions									
Terminal arrangement /Internal connections									

[Characteristics / Operation ratings]

Item				Product Discontinuation			Recommended Replacement				
				G3VM-21LR10 G3VM-21LR10(TR05)			G3VM-21UR10 G3VM-21UR10(TR05)				
Type											
Package				SSOP4			VSON4				
Contact form				1a(SPST-NO)			1a(SPST-NO)				
Terminal structure				Surface-mounting Terminals			Surface-mounting Terminals				
Absolute maximum Rating				Symbol	Unit	Rating		Rating			
Input	LED forward current			I_F	mA	30		30			
	LED reverse voltage			V_R	V	5		5			
Output	Load Voltage(AC/DC)			V_{OFF}	V	20		20			
	Continuous load current			I_O	mA	200		200			
Dielectric strength between input and output				V_{i-o}	Vrms	1,500		500			
Operating Temperature				T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature				T_{sig}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics				Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage			V_F	V	1.15	1.35	1.45	1.1	1.22	1.4
	Trigger LED Forward Current			I_{FT}	mA	-	-	3	-	0.9	3
	Release LED Forward Current			I_{FC}	mA	0.1	-	-	0.1	-	-
Output	Maximum resistance with output ON			R_{ON}	Ω	-	3	5	-	3	5
	Current leakage when the relay is open			I_{LEAK}	nA	-	0.01	0.2	-	-	1
	Capacitance between terminals			C_{OFF}	pF	-	0.8	1.1	-	0.8	1.1
Capacitance between I/O terminals				C_{i-o}	pF	-	0.3	-	-	1	-
Insulation resistance between I/O terminals				R_{i-o}	MΩ	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time				t_{ON}	ms	-	-	0.2	-	0.05	0.2
Turn-OFF time				t_{OFF}	ms	-	-	0.2	-	0.02	0.2
Approved standards				UL			-				
Dimensions											
Terminal arrangement /Internal connections				<p>TOP VIEW</p> 			<p>TOP VIEW</p> 				

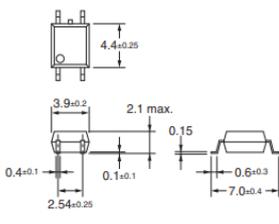
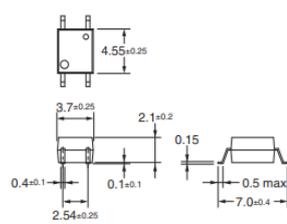
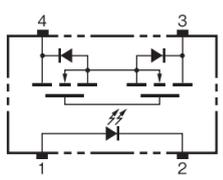
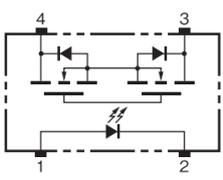
[Characteristics / Operation ratings]

Item		Product Discontinuation				Recommended Replacement			
		G3VM-21LR11 G3VM-21LR11(TR05)				G3VM-21UR11 G3VM-21UR11(TR05)			
Type									
Package		SSOP4				VSON4			
Contact form		1a(SPST-NO)				1a(SPST-NO)			
Terminal structure		Surface-mounting Terminals				Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	50			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	20			20		
	Continuous load current	I_O	mA	900			1,000		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.22	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	3	-	-	3
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	0.18	0.22	-	0.18	0.22
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	40	-	-	40	-
Capacitance between I/O terminals		C_{LO}	pF	-	0.3	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.3	2	-	-	2
Turn-OFF time		t_{OFF}	ms	-	0.2	1	-	-	1
Approved standards		UL				-			
Dimensions									
Terminal arrangement /Internal connections									

[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement		
			G3VM-31HR G3VM-31HR(TR05)			G3VM-31HR1 G3VM-31HR1(TR05)		
Type								
Package			SOP6			SOP6		
Contact form			1a(SPST-NO)			1a(SPST-NO)		
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals		
Absolute maximum Rating			Symbol	Unit	Rating		Rating	
Input	LED forward current		I_F	mA	30		30	
	LED reverse voltage		V_R	V	5		6	
Output	Load Voltage(AC/DC)		V_{OFF}	V	30		30	
	Continuous load current	Connection A	I_O	A	4.0		4.5	
		Connection B			8.0		9	
Connection C								
Dielectric strength between input and output			V_{iO}	Vrms	1,500		1,500	
Operating Temperature			T_a	°C	-40	~	+ 85	-40 ~ + 110
Storage Temperature			T_{stg}	°C	-55	~	+ 125	-55 ~ + 125
Electrical Characteristics			Symbol	Unit	Min.	Typ.	Max	Min. Typ. Max
Input	LED Forward voltage		V_F	V	1.18	1.33	1.48	1.5 1.65 1.8
	Trigger LED Forward Current		I_{FT}	mA	-	0.3	3	- 0.3 3
	Release LED Forward Current		I_{FC}	mA	0.1	-	-	0.1 - -
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.02	0.04	- 0.022 0.03
		Connection B			-	0.008	0.02	- 0.011 0.015
		Connection C			-	0.004	0.01	- 0.006 0.008
Current leakage when the relay is open		I_{LEAK}	nA	-	-	1000	- - 1000	
Capacitance between terminals		C_{OFF}	pF	-	1100	-	- 1200 -	
Capacitance between I/O terminals		C_{iO}	pF	-	0.8	-	- 0.8 -	
Insulation resistance between I/O terminals		R_{iO}	M Ω	1000	1.00E+08	-	1000 1.00E+08 -	
Turn-ON time		t_{ON}	ms	-	1.1	5	- 0.6 2	
Turn-OFF time		t_{OFF}	ms	-	0.1	1	- 0.15 0.5	
Approved standards			UL			UL		
Dimensions								
Terminal arrangement /Internal connections			<p>TOP VIEW</p>			<p>TOP VIEW</p>		

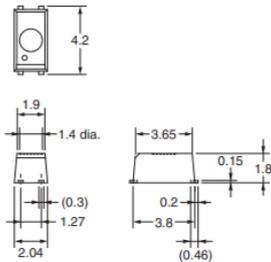
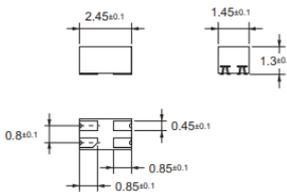
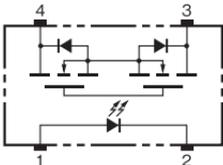
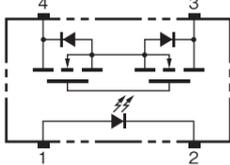
[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement				
			G3VM-41GR8 G3VM-41GR8(TR)			G3VM-61VR G3VM-61VR(TR)				
Type										
Package			SOP4			Special SOP4				
Contact form			1a(SPST-NO)			1a(SPST-NO)				
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals				
Absolute maximum Rating			Symbol	Unit	Rating		Rating			
Input	LED forward current	I_F	mA	30		50				
	LED reverse voltage	V_R	V	5		6				
Output	Load Voltage(AC/DC)	V_{OFF}	V	40		60				
	Continuous load current	I_O	A	1		1.4				
Dielectric strength between input and output			V_{LO}	Vrms	1,500		3,750			
Operating Temperature			T_a	°C	-40	~	+ 85	-40 ~ + 110		
Storage Temperature			T_{stg}	°C	-55	~	+ 125	-40 ~ + 125		
Electrical Characteristics			Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1.18	1.33	1.48	1.1	1.27	1.4	
	Trigger LED Forward Current	I_{FT}	mA	-	1	3	-	1	3	
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-	
Output	Maximum resistance with output ON	R_{ON}	mΩ	-	100	130	-	130	250	
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1	-	2	1000	
	Capacitance between terminals	C_{OFF}	pF	-	300	-	-	100	-	
Capacitance between I/O terminals			C_{LO}	pF	-	0.8	-	-	0.8	-
Insulation resistance between I/O terminals			R_{LO}	MΩ	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time			t_{ON}	ms	-	1.2	3	-	2	3
Turn-OFF time			t_{OFF}	ms	-	0.2	0.5	-	0.1	1
Approved standards			UL			UL				
Dimensions										
Terminal arrangement /Internal connections			<p>TOP VIEW</p> 			<p>TOP VIEW</p> 				

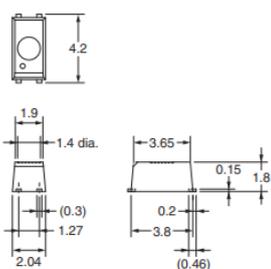
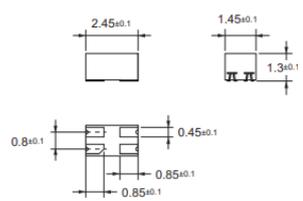
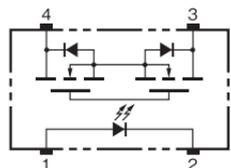
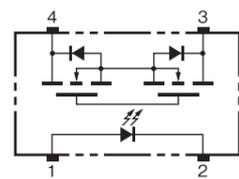
[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement		
			G3VM-41HR G3VM-41HR(TR)			G3VM-61HR2 G3VM-61HR2(TR05)		
Type								
Package			SOP6			SOP6		
Contact form			1a(SPST-NO)			1a(SPST-NO)		
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals		
Absolute maximum Rating			Symbol	Unit	Rating		Rating	
Input	LED forward current		I_F	mA	30		30	
	LED reverse voltage		V_R	V	5		6	
Output	Load Voltage(AC/DC)		V_{OFF}	V	40		60	
	Continuous load current	Connection A	I_O	A	2.5		4.0	
		Connection B			5.0		8	
Connection C								
Dielectric strength between input and output			V_{iO}	Vrms	1,500		1,500	
Operating Temperature			T_a	°C	-40	~	+ 85	-40 ~ + 110
Storage Temperature			T_{stg}	°C	-55	~	+ 125	-55 ~ + 125
Electrical Characteristics			Symbol	Unit	Min.	Typ.	Max	Min. Typ. Max
Input	LED Forward voltage		V_F	V	1.18	1.33	1.48	1.5 1.65 1.8
	Trigger LED Forward Current		I_{FT}	mA	-	0.4	3	- 0.3 3
	Release LED Forward Current		I_{FC}	mA	0.1	-	-	0.1 - -
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.03	0.06	- 0.028 0.04
		Connection B			-	0.015	0.03	- 0.014 0.02
		Connection C			-	0.008	-	- 0.007 0.01
	Current leakage when the relay is open		I_{LEAK}	nA	-	-	10	- - 1000
Capacitance between terminals		C_{OFF}	pF	-	1000	-	- 750 -	
Capacitance between I/O terminals		C_{iO}	pF	-	0.8	-	- 0.8 -	
Insulation resistance between I/O terminals		R_{iO}	M Ω	1000	1.00E+08	-	1000 1.00E+08 -	
Turn-ON time		t_{ON}	ms	-	1	5	- 0.6 2	
Turn-OFF time		t_{OFF}	ms	-	0.15	1	- 0.15 0.5	
Approved standards			UL			UL		
Dimensions								
Terminal arrangement /Internal connections								

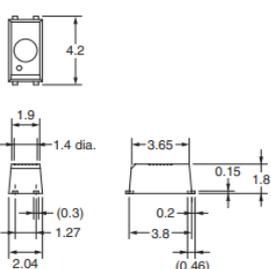
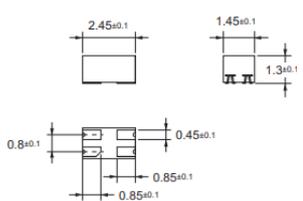
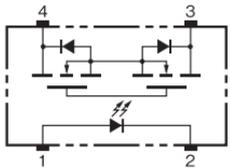
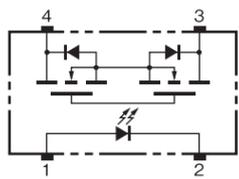
[Characteristics / Operation ratings]

Item		Product Discontinuation				Recommended Replacement			
		G3VM-41LR10 G3VM-41LR10(TR05)				G3VM-41UR10 G3VM-41UR10(TR05)			
Type									
Package		SSOP4				VSON4			
Contact form		1a(SPST-NO)				1a(SPST-NO)			
Terminal structure		Surface-mounting Terminals				Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	30			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	40			40		
	Continuous load current	I_O	A	0.12			0.12		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1.15	1.35	1.45	1.1	1.27	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	3	-	-	3
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	12	14	-	12	14
	Current leakage when the relay is open	I_{LEAK}	nA	-	0.01	0.2	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	0.45	0.8	-	0.45	0.8
Capacitance between I/O terminals		C_{LO}	pF	-	0.3	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	-	0.2	-	-	0.2
Turn-OFF time		t_{OFF}	ms	-	-	0.3	-	-	0.3
Approved standards		UL				-			
Dimensions									
Terminal arrangement /Internal connections		<p>TOP VIEW</p> 				<p>TOP VIEW</p> 			

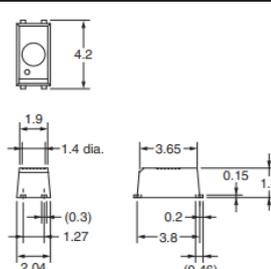
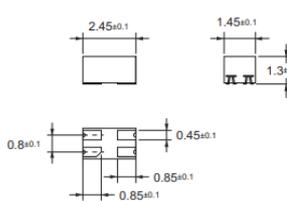
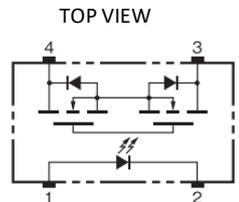
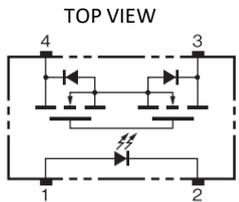
[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement			
			G3VM-41LR11 G3VM-41LR11(TR05)			G3VM-41UR11 G3VM-41UR11(TR05)			
Type									
Package			SSOP4			VSON4			
Contact form			1a(SPST-NO)			1a(SPST-NO)			
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	30			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	40			40		
	Continuous load current	I_O	A	0.14			0.14		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1.15	1.3	1.45	1.1	1.27	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	3	-	0.7	3
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	7	10	-	5	10
	Current leakage when the relay is open	I_{LEAK}	nA	-	0.01	0.2	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	0.7	1.3	-	0.7	1.3
Capacitance between I/O terminals		C_{LO}	pF	-	0.3	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	-	0.2	-	0.06	0.2
Turn-OFF time		t_{OFF}	ms	-	-	0.2	-	0.03	0.2
Approved standards			UL			-			
Dimensions									
Terminal arrangement /Internal connections			<p>TOP VIEW</p> 			<p>TOP VIEW</p> 			

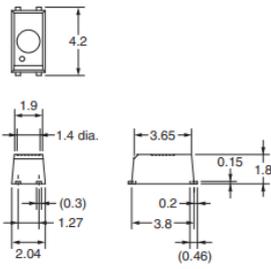
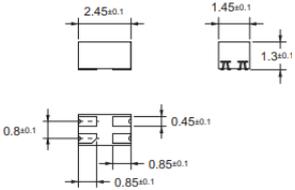
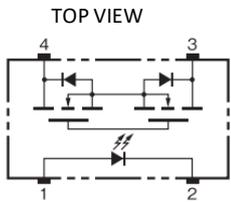
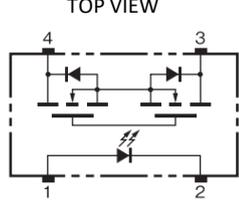
[Characteristics / Operation ratings]

Item		Product Discontinuation				Recommended Replacement			
		G3VM-41LR4 G3VM-41LR4(TR05)				G3VM-41UR4 G3VM-41UR4(TR05)			
Type									
Package		SSOP4				VSON4			
Contact form		1a(SPST-NO)				1a(SPST-NO)			
Terminal structure		Surface-mounting Terminals				Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	50			30		
	LED reverse voltage	V_R	V	5			6		
Output	Load Voltage(AC/DC)	V_{OFF}	V	40			40		
	Continuous load current	I_O	mA	250			250		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.27	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	4	-	0.8	3
	Release LED Forward Current	I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	2	3	-	2	3
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	5	7	-	5	7
Capacitance between I/O terminals		C_{LO}	pF	-	0.8	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.12	0.5	-	0.08	0.3
Turn-OFF time		t_{OFF}	ms	-	0.14	0.5	-	0.04	0.3
Approved standards		UL				-			
Dimensions									
Terminal arrangement /Internal connections		<p>TOP VIEW</p> 				<p>TOP VIEW</p> 			

[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement			
			G3VM-41LR5 G3VM-41LR5(TR05)			G3VM-41UR12 G3VM-41UR12(TR05)			
Type									
Package			SSOP4			VSON4			
Contact form			1a(SPST-NO)			1a(SPST-NO)			
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	50			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	40			40		
	Continuous load current	I_O	mA	300			100		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~ + 110	
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~ + 125	
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.27	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	4	-	0.9	3
	Release LED Forward Current	I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	1	1.5	-	15	20
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	10	14	-	0.3	0.6
Capacitance between I/O terminals		C_{LO}	pF	-	0.8	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	MΩ	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.2	0.5	-	0.05	0.2
Turn-OFF time		t_{OFF}	ms	-	0.2	0.5	-	0.03	0.2
Approved standards			UL			-			
Dimensions									
Terminal arrangement /Internal connections									

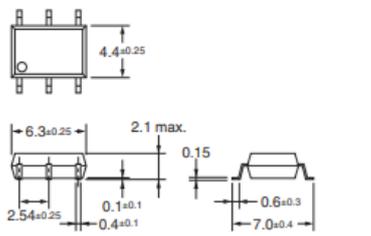
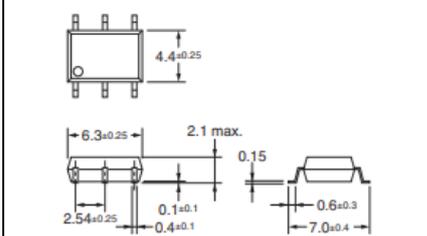
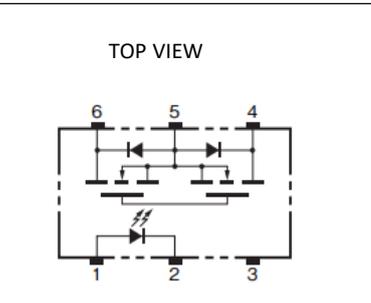
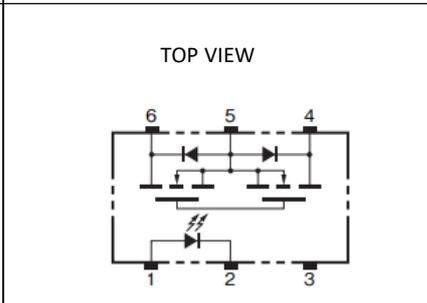
[Characteristics / Operation ratings]

Item		Product Discontinuation				Recommended Replacement			
		G3VM-41LR6 G3VM-41LR6(TR05)				G3VM-41UR12 G3VM-41UR12(TR05)			
Type									
Package		SSOP4				VSON4			
Contact form		1a(SPST-NO)				1a(SPST-NO)			
Terminal structure		Surface-mounting Terminals				Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	50			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	40			40		
	Continuous load current	I_O	mA	120			100		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.27	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	-	4	-	0.9	3
	Release LED Forward Current	I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	10	15	-	15	20
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	1	2	-	0.3	0.6
Capacitance between I/O terminals		C_{LO}	pF	-	0.8	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.05	0.5	-	0.05	0.2
Turn-OFF time		t_{OFF}	ms	-	0.12	0.5	-	0.03	0.2
Approved standards		UL				-			
Dimensions									
Terminal arrangement /Internal connections									

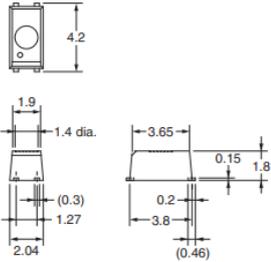
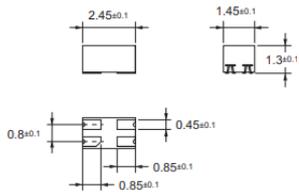
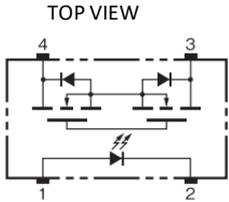
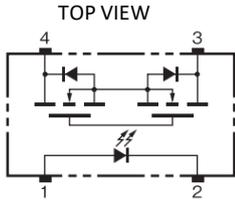
[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement		
			G3VM-61HR G3VM-61HR(TR)			G3VM-61HR2 G3VM-61HR2(TR05)		
Type								
Package			SOP6			SOP6		
Contact form			1a(SPST-NO)			1a(SPST-NO)		
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals		
Absolute maximum Rating			Symbol	Unit	Rating		Rating	
Input	LED forward current		I_F	mA	30		30	
	LED reverse voltage		V_R	V	5		6	
Output	Load Voltage(AC/DC)		V_{OFF}	V	60		60	
	Continuous load current	Connection A	I_O	A	2.3		4.0	
		Connection B			4.6		8	
Connection C								
Dielectric strength between input and output			V_{iO}	Vrms	1,500		1,500	
Operating Temperature			T_a	°C	-40	~	+ 85	-40 ~ + 110
Storage Temperature			T_{stg}	°C	-55	~	+ 125	-55 ~ + 125
Electrical Characteristics			Symbol	Unit	Min.	Typ.	Max	Min. Typ. Max
Input	LED Forward voltage		V_F	V	1.18	1.33	1.48	1.5 1.65 1.8
	Trigger LED Forward Current		I_{FT}	mA	-	0.4	3	- 0.3 3
	Release LED Forward Current		I_{FC}	mA	0.1	-	-	0.1 - -
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.04	0.07	- 0.028 0.04
		Connection B			-	0.02	0.04	- 0.014 0.02
		Connection C			-	0.01	-	- 0.007 0.01
Current leakage when the relay is open		I_{LEAK}	nA	-	-	10	- - 1000	
Capacitance between terminals		C_{OFF}	pF	-	1000	-	- 750 -	
Capacitance between I/O terminals		C_{iO}	pF	-	0.8	-	- 0.8 -	
Insulation resistance between I/O terminals		R_{iO}	M Ω	1000	1.00E+08	-	1000 1.00E+08 -	
Turn-ON time		t_{ON}	ms	-	1	5	- 0.6 2	
Turn-OFF time		t_{OFF}	ms	-	0.15	1	- 0.15 0.5	
Approved standards			UL			UL		
Dimensions								
Terminal arrangement /Internal connections			<p>TOP VIEW</p>			<p>TOP VIEW</p>		

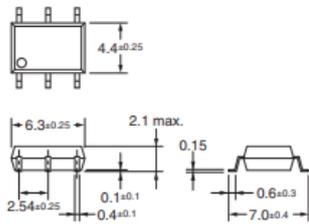
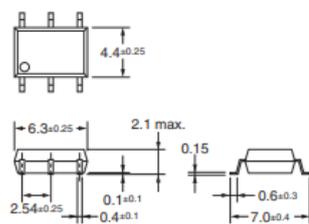
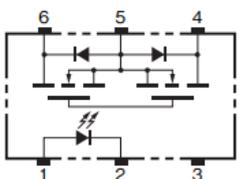
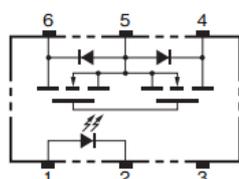
[Characteristics / Operation ratings]

Item	Product Discontinuation			Recommended Replacement						
	G3VM-61HR1 G3VM-61HR1(TR05)			G3VM-61HR2 G3VM-61HR2(TR05)						
Type										
Package		SOP6			SOP6					
Contact form		1a(SPST-NO)			1a(SPST-NO)					
Terminal structure		Surface-mounting Terminals			Surface-mounting Terminals					
Absolute maximum Rating		Symbol	Unit	Rating		Rating				
Input	LED forward current	I_F	mA	30		30				
	LED reverse voltage	V_R	V	5		6				
Output	Load Voltage(AC/DC)	V_{OFF}	V	60		60				
	Continuous load current	Connection A	I_O	A	3.3		4			
		Connection B			6.6		8			
Connection C										
Dielectric strength between input and output		V_{I-O}	Vrms	1,500		1,500				
Operating Temperature		T_a	°C	-40 ~ + 85		-40 ~ + 110				
Storage Temperature		T_{stg}	°C	-55 ~ + 125		-55 ~ + 125				
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max	
Input	LED Forward voltage	V_F	V	1.18	1.33	1.48	1.5	1.65	1.8	
	Trigger LED Forward Current	I_{FT}	mA	-	0.2	3	-	0.3	3	
	Release LED Forward Current	I_{FC}	mA	0.1	-	-	0.1	-	-	
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.03	0.06	-	0.028	0.04
		Connection B			-	0.015	-	-	0.014	0.02
		Connection C			-	0.008	-	-	0.007	0.01
Current leakage when the relay is open		I_{LEAK}	nA	-	-	20	-	-	1000	
Capacitance between terminals		C_{OFF}	pF	-	700	1500	-	750	-	
Capacitance between I/O terminals		C_{I-O}	pF	-	0.8	-	-	0.8	-	
Insulation resistance between I/O terminals		R_{I-O}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-	
Turn-ON time		t_{ON}	ms	-	0.6	5	-	0.6	2	
Turn-OFF time		t_{OFF}	ms	-	0.2	1	-	0.15	0.5	
Approved standards				UL		UL				
Dimensions										
Terminal arrangement /Internal connections				<p>TOP VIEW</p> 			<p>TOP VIEW</p> 			

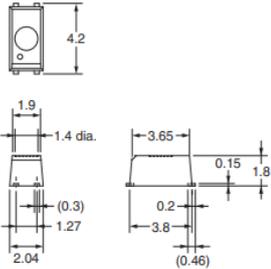
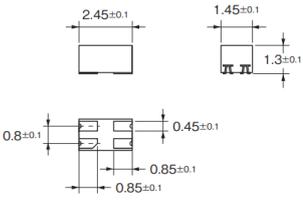
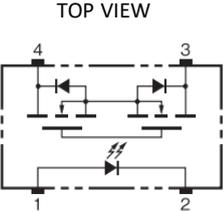
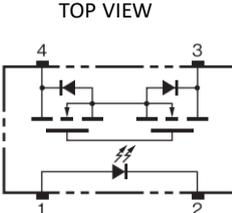
[Characteristics / Operation ratings]

Item		Product Discontinuation				Recommended Replacement			
		G3VM-61LR G3VM-61LR(TR05)				G3VM-61UR G3VM-61UR(TR05)			
Type									
Package		SSOP4				VSON4			
Contact form		1a(SPST-NO)				1a(SPST-NO)			
Terminal structure		Surface-mounting Terminals				Surface-mounting Terminals			
Absolute maximum Rating		Symbol	Unit	Rating			Rating		
Input	LED forward current	I_F	mA	50			30		
	LED reverse voltage	V_R	V	5			5		
Output	Load Voltage(AC/DC)	V_{OFF}	V	60			60		
	Continuous load current	I_O	mA	400			400		
Dielectric strength between input and output		V_{LO}	Vrms	1,500			500		
Operating Temperature		T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature		T_{stg}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics		Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage	V_F	V	1	1.15	1.3	1.1	1.22	1.4
	Trigger LED Forward Current	I_{FT}	mA	-	2	5	-	-	3
	Release LED Forward Current	I_{FC}	mA	0.2	-	-	0.1	-	-
Output	Maximum resistance with output ON	R_{ON}	Ω	-	1	1.5	-	1	1.5
	Current leakage when the relay is open	I_{LEAK}	nA	-	-	1000	-	-	1
	Capacitance between terminals	C_{OFF}	pF	-	20	30	-	20	-
Capacitance between I/O terminals		C_{LO}	pF	-	0.3	-	-	1	-
Insulation resistance between I/O terminals		R_{LO}	M Ω	1000	1.00E+08	-	1000	1.00E+08	-
Turn-ON time		t_{ON}	ms	-	0.3	1	-	-	0.5
Turn-OFF time		t_{OFF}	ms	-	0.2	1	-	-	0.5
Approved standards		UL				-			
Dimensions									
Terminal arrangement /Internal connections									

[Characteristics / Operation ratings]

Item			Product Discontinuation			Recommended Replacement		
			G3VM-81HR G3VM-81HR(TR)			G3VM-101HR2 G3VM-101HR2(TR)		
Type								
Package			SOP6			SOP6		
Contact form			1a(SPST-NO)			1a(SPST-NO)		
Terminal structure			Surface-mounting Terminals			Surface-mounting Terminals		
Absolute maximum Rating			Symbol	Unit	Rating		Rating	
Input	LED forward current		I_F	mA	50		30	
	LED reverse voltage		V_R	V	5		6	
Output	Load Voltage(AC/DC)		V_{OFF}	V	80		100	
	Continuous load current	Connection A	I_O	A	1.25		3.0	
		Connection B			2.5		6	
Connection C								
Dielectric strength between input and output			V_{LO}	Vrms	1,500		1,500	
Operating Temperature			T_a	°C	-40	~	+ 85	-40 ~ + 110
Storage Temperature			T_{stg}	°C	-55	~	+ 125	-55 ~ + 125
Electrical Characteristics			Symbol	Unit	Min.	Typ.	Max	Min. Typ. Max
Input	LED Forward voltage		V_F	V	1	1.15	1.3	1.5 1.65 1.8
	Trigger LED Forward Current		I_{FT}	mA	-	2	5	- 0.35 3
	Release LED Forward Current		I_{FC}	mA	0.2	-	-	0.1 - -
Output	Maximum resistance with output ON	Connection A	R_{ON}	Ω	-	0.11	0.15	- 0.05 0.065
		Connection B			-	0.06	0.08	- 0.025 0.033
		Connection C			-	0.03	0.04	- 0.013 0.016
	Current leakage when the relay is open		I_{LEAK}	nA	-	1.2	1.5	- - 1000
Capacitance between terminals		C_{OFF}	pF	-	460	1000	- 460 -	
Capacitance between I/O terminals			C_{LO}	pF	-	0.8	-	- 0.8 -
Insulation resistance between I/O terminals			R_{LO}	M Ω	1000	1.00E+08	-	1000 1.00E+08 -
Turn-ON time			t_{ON}	ms	-	2	3	- 0.45 2
Turn-OFF time			t_{OFF}	ms	-	0.7	1	- 0.1 0.5
Approved standards			UL			UL		
Dimensions								
Terminal arrangement /Internal connections			<p>TOP VIEW</p> 			<p>TOP VIEW</p> 		

[Characteristics / Operation ratings]

Item				Product Discontinuation			Recommended Replacement				
				G3VM-81LR G3VM-81LR(TR05)			G3VM-81UR G3VM-81UR(TR05)				
Type											
Package				SSOP4			VSON4				
Contact form				1a(SPST-NO)			1a(SPST-NO)				
Terminal structure				Surface-mounting Terminals			Surface-mounting Terminals				
Absolute maximum Rating				Symbol	Unit	Rating		Rating			
Input	LED forward current			I_F	mA	50		30			
	LED reverse voltage			V_R	V	5		5			
Output	Load Voltage(AC/DC)			V_{OFF}	V	80		80			
	Continuous load current			I_O	mA	120		120			
Dielectric strength between input and output				V_{LO}	Vrms	1,500		500			
Operating Temperature				T_a	°C	-20	~	+ 85	-40	~	+ 110
Storage Temperature				T_{sig}	°C	-40	~	+ 125	-40	~	+ 125
Electrical Characteristics				Symbol	Unit	Min.	Typ.	Max	Min.	Typ.	Max
Input	LED Forward voltage			V_F	V	1	1.15	1.3	1.1	1.22	1.4
	Trigger LED Forward Current			I_{FT}	mA	-	2	5	-	-	3
	Release LED Forward Current			I_{FC}	mA	0.1	-	-	0.1	-	-
Output	Maximum resistance with output ON			R_{ON}	Ω	-	7.5	12	-	7	12
	Current leakage when the relay is open			I_{LEAK}	nA	-	-	0.2	-	-	0.02
	Capacitance between terminals			C_{OFF}	pF	-	5	7	-	5	7
Capacitance between I/O terminals				C_{LO}	pF	-	0.8	-	-	1	-
Insulation resistance between I/O terminals				R_{LO}	M Ω	1000	1.00E+08	-	-	1.00E+08	-
Turn-ON time				t_{ON}	ms	-	0.1	0.25	-	-	0.5
Turn-OFF time				t_{OFF}	ms	-	0.15	0.2	-	-	0.2
Approved standards				UL			-				
Dimensions											
Terminal arrangement /Internal connections											

[Operation methods]**There is no change in the operation method.**

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.