

Revision of S3XB SK5XB SK3XB series datasheet **Comparison report**

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Revision for A

Subject: S3AB series

old datasheet version

Version:K1701

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)					
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage per diode ⁽¹⁾	$I_F = 3\text{A}, T_J = 25^\circ\text{C}$	V_F	-	1.15	V
Reverse current @ rated V_R per diode ⁽²⁾	$T_J = 25^\circ\text{C}$	I_R	-	10	μA
	$T_J = 125^\circ\text{C}$		-	250	μA
Junction capacitance	1 MHz, $V_R = 4.0\text{V}$	C_J	40	-	pF
Reverse recovery time	$I_F = 0.5\text{A}, I_R = 1.0\text{A}$ $I_{RR} = 0.25\text{A}$	t_{rr}	-	1500	ns

new datasheet version

Revise trr From Maximum to Typical

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)					
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage per diode ⁽¹⁾	$I_F = 3\text{A}, T_J = 25^\circ\text{C}$	V_F	-	1.15	V
Reverse current @ rated V_R per diode ⁽²⁾	$T_J = 25^\circ\text{C}$	I_R	-	10	μA
	$T_J = 125^\circ\text{C}$		-	250	μA
Junction capacitance	1 MHz, $V_R = 4.0\text{V}$	C_J	40	-	pF
Reverse recovery time	$I_F = 0.5\text{A}, I_R = 1.0\text{A}$ $I_{RR} = 0.25\text{A}$	t_{rr}	1500	-	ns

Conclusion

The trr before version K is typical, but in the K version of the trr is misused as Max value. So it must be changed to typical.

Subject: SK52B series

old datasheet version

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)						
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT	
Forward voltage per diode ⁽¹⁾	SK52B	$I_F = 1\text{A}$, $T_J = 25^\circ\text{C}$	V_F		2	V
	SK53B			-	0.50	V
	SK54B					V
	SK55B				0.75	V
	SK56B				0.75	V
	SK59B				0.85	V
	SK510B				0.85	V
	SK515B				0.95	V

new datasheet version

Revise V_F and $I_F \rightarrow$ History has no revised V_F and I_F , it may be a typo.

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)						
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT	
Forward voltage per diode ⁽¹⁾	SK52B	$I_F = 5\text{A}$, $T_J = 25^\circ\text{C}$	V_F		2	V
	SK53B			-	0.55	V
	SK54B					V
	SK55B				0.75	V
	SK56B				0.75	V
	SK59B				0.85	V
	SK510B				0.85	V
	SK515B				0.95	V

Conclusion

- SK52B is 5A product, so it is a typo,
- In versions I to J, history never changed V_F , but the J version changed, so it is a typo.

Subject: SK32B series

old datasheet version

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)						
PARAMETER		CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage per diode ⁽¹⁾	SK32B	$I_F = 1\text{A}$ $T_J = 25^\circ\text{C}$	V_F	-	0.50	V
	SK33B					V
	SK34B					V
	SK35B			-	0.75	V
	SK36B					V
	SK39B					V
	SK310B			-	0.85	V
	SK315B					V
	SK320B					V
				-	0.95	V

new datasheet version

Revise IF → History has no revised IF, it may be a typo.

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)						
PARAMETER		CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage per diode ⁽¹⁾	SK32B	$I_F = 3\text{A}$ $T_J = 25^\circ\text{C}$	V_F	-	0.50	V
	SK33B					V
	SK34B					V
	SK35B			-	0.75	V
	SK36B					V
	SK39B					V
	SK310B			-	0.85	V
	SK315B					V
	SK320B					V
				-	0.95	V

Conclusion

SK52B is 3A product, so it is a typo,