

Comparison Information

TOSHIBA TLP185 / TLP185(SE and TLP184 / TLP184(SE

TOSHIBA

Toshiba Electronics Europe GmbH

April 2021

DCN April 2021: TLP18x(E(O → TLP18x(SE(T – April 2021

Partnumber	Phase-Out	Obsole	Direct Replacement partnumber
TLP185(BLL,E(O	202207	202210	TLP185(BLL,SE(T
TLP185(BLL-TPL,E(O	202207	202210	TLP185(BLL-TL,SE(T
TLP185(BLL-TPR,E(O	202207	202210	TLP185(BLL-TR,SE(T
TLP185(E(O	202207	202210	TLP185(GR-SE(T
TLP185(GB,E(O	202207	202210	TLP185(GR,SE(T
TLP185(GB-TPL,E(O	202207	202210	TLP185(GR-TPL,SE(T
TLP185(GB-TPR,E(O	202207	202210	TLP185(GR-TPR,SE(T
TLP185(GR,E(O	202207	202210	TLP185(GR,SE(T
TLP185(GRH,E(O	202207	202210	TLP185(GRH,SE(T
TLP185(GRH-TPL,E(O	202207	202210	TLP185(GRH-TL,SE(T
TLP185(GRH-TPR,E(O	202207	202210	TLP185(GRH-TR,SE(T
TLP185(GRL,E(O	202207	202210	TLP185(GRL,SE(T
TLP185(GRL-TPL,E(O	202207	202210	TLP185(GRL-TL,SE(T
TLP185(GRL-TPR,E(O	202207	202210	TLP185(GRL-TR,SE(T
TLP185(GR-TPL,E(O	202207	202210	TLP185(GR-TPL,SE(T
TLP185(GR-TPR,E(O	202207	202210	TLP185(GR-TPR,SE(T
TLP185(GR-TPRS,E(O	202207	202210	TLP185(GR-TPR,SE(T
TLP185(HITMGBTLE(O	202207	202210	TLP185(GR-TPL,SE(T
TLP185(HOGB-TL,E(O	202207	202210	TLP185(HOGRTL,SE(T
TLP185(PSEGBTL,E(O	202207	202210	TLP185(PSEGBTLSE(T
TLP185(TPL,E(O	202207	202210	TLP185(GR-TPL,SE(T
TLP185(TPR,E(O	202207	202210	TLP185(GR-TPR,SE(T
TLP185(UR-GRTR,E(O	202207	202210	TLP185(URGRTR,SE(T
TLP185(V4,E(O	202207	202210	TLP185(V4-GR,SE(T
TLP185(V4-BLL,E(O	202207	202210	TLP185(V4-BLL,SE(T
TLP185(V4B-TL,E(O	202207	202210	TLP185(V4B-TL,SE(T
TLP185(V4B-TR,E(O	202207	202210	TLP185(V4B-TR,SE(T
TLP185(V4-GB,E(O	202207	202210	TLP185(V4-GR,SE(T
TLP185(V4GB-TL,E(O	202207	202210	TLP185(V4GRTL,SE(T
TLP185(V4GB-TR,E(O	202207	202210	TLP185(V4GRTR,SE(T

Partnumber	Phase-Out	Obsole	Direct Replacement partnumber
TLP185(V4GH-TL,E(O	202207	202210	TLP185(V4GHTL,SE(T
TLP185(V4GH-TR,E(O	202207	202210	TLP185(V4GHTR,SE(T
TLP185(V4GL-TL,E(O	202207	202210	TLP185(V4GLTL,SE(T
TLP185(V4GL-TR,E(O	202207	202210	TLP185(V4GLTR,SE(T
TLP185(V4-GR,E(O	202207	202210	TLP185(V4-GR,SE(T
TLP185(V4-GRH,E(O	202207	202210	TLP185(V4-GRH,SE(T
TLP185(V4-GRL,E(O	202207	202210	TLP185(V4-GRL,SE(T
TLP185(V4GR-TL,E(O	202207	202210	TLP185(V4GRTL,SE(T
TLP185(V4GR-TR,E(O	202207	202210	TLP185(V4GRTR,SE(T
TLP185(V4-TPL,E(O	202207	202210	TLP185(V4GRTL,SE(T
TLP185(V4-TPR,E(O	202207	202210	TLP185(V4GRTR,SE(T
TLP185(V4-Y,E(O	202207	202210	TLP185(V4-Y,SE(T
TLP185(V4-YH,E(O	202207	202210	TLP185(V4-YH,SE(T
TLP185(V4YH-TL,E(O	202207	202210	TLP185(V4YHTL,SE(T
TLP185(V4YH-TR,E(O	202207	202210	TLP185(V4YHTR,SE(T
TLP185(V4-YL,E(O	202207	202210	TLP185(V4-YL,SE(T
TLP185(V4YL-TL,E(O	202207	202210	TLP185(V4YLTL,SE(T
TLP185(V4YL-TR,E(O	202207	202210	TLP185(V4YLTR,SE(T
TLP185(V4-Y-TL,E(O	202207	202210	TLP185(V4Y-TL,SE(T
TLP185(V4-Y-TR,E(O	202207	202210	TLP185(V4Y-TR,SE(T
TLP185(Y,E(O	202207	202210	TLP185(Y,SE(T
TLP185(YH,E(O	202207	202210	TLP185(YH,SE(T
TLP185(YH-TPL,E(O	202207	202210	TLP185(YH-TPL,SE(T
TLP185(YH-TPR,E(O	202207	202210	TLP185(YH-TPR,SE(T
TLP185(YL,E(O	202207	202210	TLP185(YL,SE(T
TLP185(YL-TPL,E(O	202207	202210	TLP185(YL-TPL,SE(T
TLP185(YL-TPR,E(O	202207	202210	TLP185(YL-TPR,SE(T
TLP185(Y-TPL,E(O	202207	202210	TLP185(Y-TPL,SE(T
TLP185(Y-TPR,E(O	202207	202210	TLP185(Y-TPR,SE(T

Partnumber	Phase-Out	Obsole	Direct Replacement partnumber
TLP184(BLL,E(O	202207	202210	TLP184(BLL,SE(T
TLP184(BLL-TPL,E(O	202207	202210	TLP184(BLL-TL,SE(T
TLP184(BLL-TPR,E(O	202207	202210	TLP184(BLL-TR,SE(T
TLP184(E(O	202207	202210	TLP184(GR,SE(T
TLP184(GB,E(O	202207	202210	TLP184(GR,SE(T
TLP184(GB-TPL,E(O	202207	202210	TLP184(GR-TPL,SE(T
TLP184(GB-TPR,E(O	202207	202210	TLP184(GR-TPR,SE(T
TLP184(GR,E(O	202207	202210	TLP184(GR,SE(T
TLP184(GR-TPL,E(O	202207	202210	TLP184(GR-TPL,SE(T
TLP184(GR-TPR,E(O	202207	202210	TLP184(GR-TPR,SE(T
TLP184(HO-TPL,E(O	202207	202210	TLP184(HO-TPL,SE(T
TLP184(TPL,E(O	202207	202210	TLP184(GR-TPL,SE(T
TLP184(TPR,E(O	202207	202210	TLP184(GR-TPR,SE(T
TLP184(V4,E(O	202207	202210	TLP184(V4-GR,SE(T
TLP184(V4-BLL,E(O	202207	202210	TLP184(V4-BLL,SE(T
TLP184(V4B-TL,E(O	202207	202210	TLP184(V4B-TL,SE(T
TLP184(V4B-TR,E(O	202207	202210	TLP184(V4B-TR,SE(T
TLP184(V4-GB,E(O	202207	202210	TLP184(V4-GR,SE(T
TLP184(V4GB-TL,E(O	202207	202210	TLP184(V4GRTL,SE(T
TLP184(V4GB-TR,E(O	202207	202210	TLP184(V4GRTR,SE(T
TLP184(V4-GR,E(O	202207	202210	TLP184(V4-GR,SE(T
TLP184(V4GR-TL,E(O	202207	202210	TLP184(V4GRTL,SE(T
TLP184(V4GR-TR,E(O	202207	202210	TLP184(V4GRTR,SE(T
TLP184(V4-TPL,E(O	202207	202210	TLP184(V4-TPL,SE(T
TLP184(V4-TPR,E(O	202207	202210	TLP184(V4GRTR,SE(T
TLP184(V4-Y,E(O	202207	202210	TLP184(V4-Y,SE(T
TLP184(V4-Y-TL,E(O	202207	202210	TLP184(V4Y-TL,SE(T
TLP184(V4-Y-TR,E(O	202207	202210	TLP184(V4Y-TR,SE(T
TLP184(Y,E(O	202207	202210	TLP184(Y,SE(T
TLP184(Y-TPL,E(O	202207	202210	TLP184(Y-TPL,SE(T
TLP184(Y-TPR,E(O	202207	202210	TLP184(Y-TPR,SE(T

TLP18x(E(O → TLP18x(SE(T

- Change from TLP18x (E(O to TLP18x (SE(T has been announced already in 2013 with PCN H13-D454-0018 in March 2013
- Production of TLP184(SE and TLP185(SE is running since 2013

Page : 1 of 1
 Ref No. : H13-D454-0018
 Date : March 15, 2013

Attn: _____

PROCESS CHANGE NOTICE

Regarding Photo-coupler (SO4/6pin Tr. coupler)

We appreciate your continued patronage of our semiconductor products. The changes are planned to the following products. Please review the following contents and the attached sheet. We would appreciate your understanding.

1. Affected Products : (including specific products and (TST) products)

Package	Product Type	
SO4 type	TLP290 (*, E(X	TLP291 (*, E(X
SO6 type	TLP184 (*, E(X	TLP185 (*, E(X

(Note) *... CTR rank, X... O: (Buzen) products, JorT: (TST) products

2. Change description : Refer to the attached sheet (page 1 to 14).

No.	Changes	Before change	After change
1)	Consolidation of manufacturing site	<ul style="list-style-type: none"> • Buzen Toshiba Electronics Corporation : Japan • Toshiba Semiconductor (Thailand) Co.,Ltd. : Thailand 	<ul style="list-style-type: none"> • Toshiba Semiconductor (Thailand) Co.,Ltd. : Thailand
2)	Part name is not changed except for adding suffixes	<ul style="list-style-type: none"> • Domestic product : ... TLP290(*,E(O • Thailand product produced before flooding: ... TLP290(*,E(J 	TLP290(*,SE(T
3)	Change of inner frame shape	See attachment.	See attachment
4)	Addition rank and specification change	BL rank : not available. General rank : Max.400 GB rank : Max.400	BL rank (additional): 200 - 600 General rank : Max.600 GB rank : Max.600

3. Purpose of Change :

- 1), 2) : Productivity improvement by consolidating operation into overseas manufacturing site.
- 3) : Improvement of optical coupling efficiency.
- 4) : Optimization of specification by improvement of optical coupling efficiency.

4. Product characteristics :

There is no change in Photo and LED chip. However, with change of inner frame shape, optical coupling characteristics are improved.

5. Implementation Schedule :

The changed products are planned to be shipped from the production of May 2013.

6. Request from Toshiba

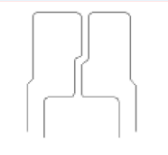
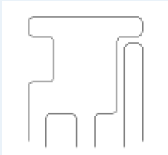


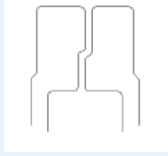
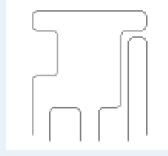
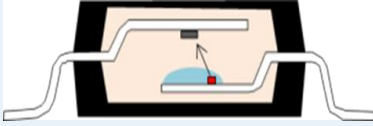


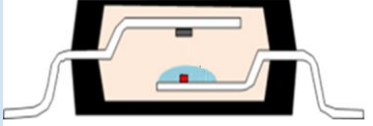
If you have any question or inconvenience on this issue, please feel free to contact us through our sales representative before April 18, 2013.

Sincerely,

M. Shirahama

Megumi Shirahama / Manager
 Quality Assurance Group
 Quality Assurance Department
 Himeji Operations-Semiconductor
 Toshiba Corporation Semiconductor & Storage Products Company

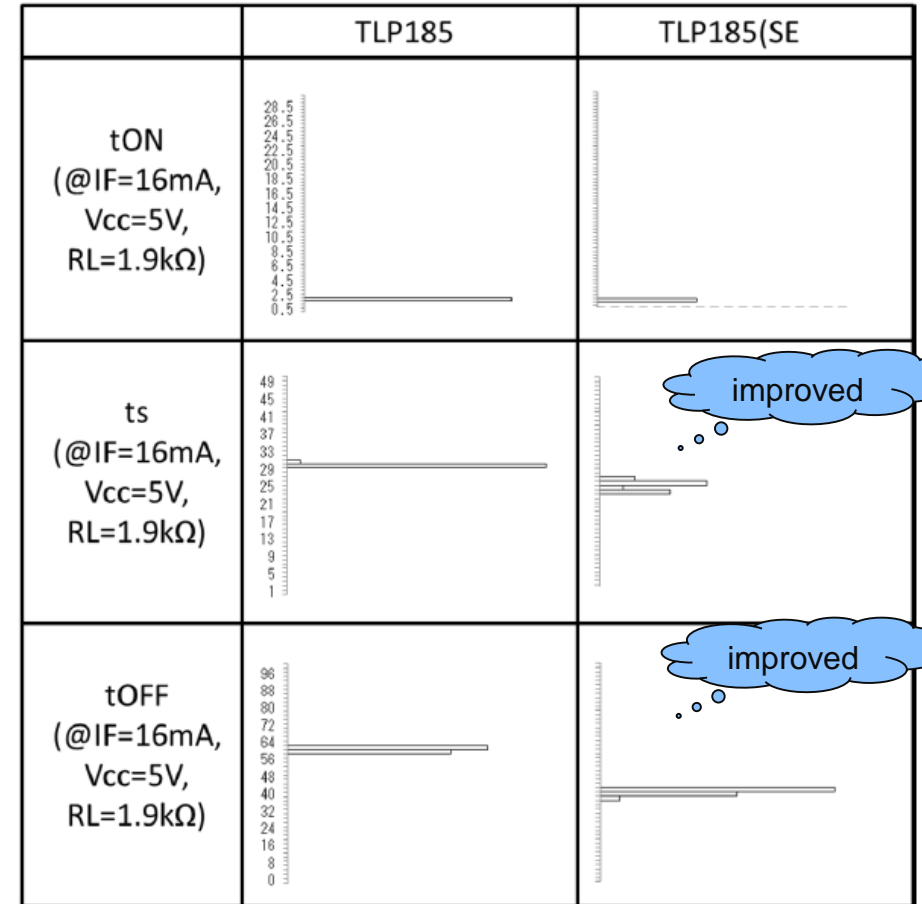
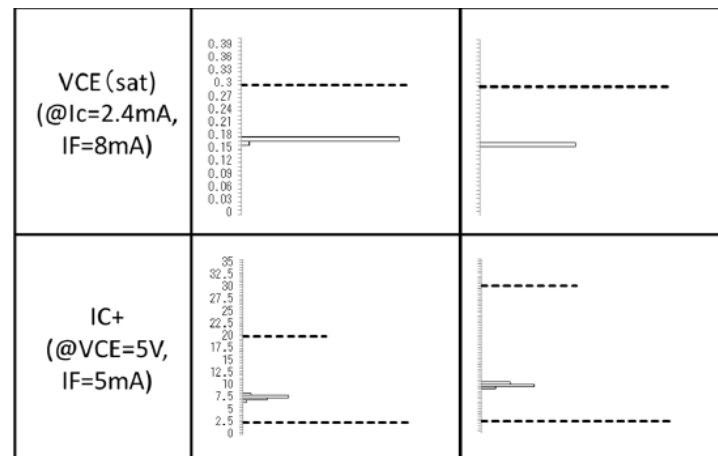
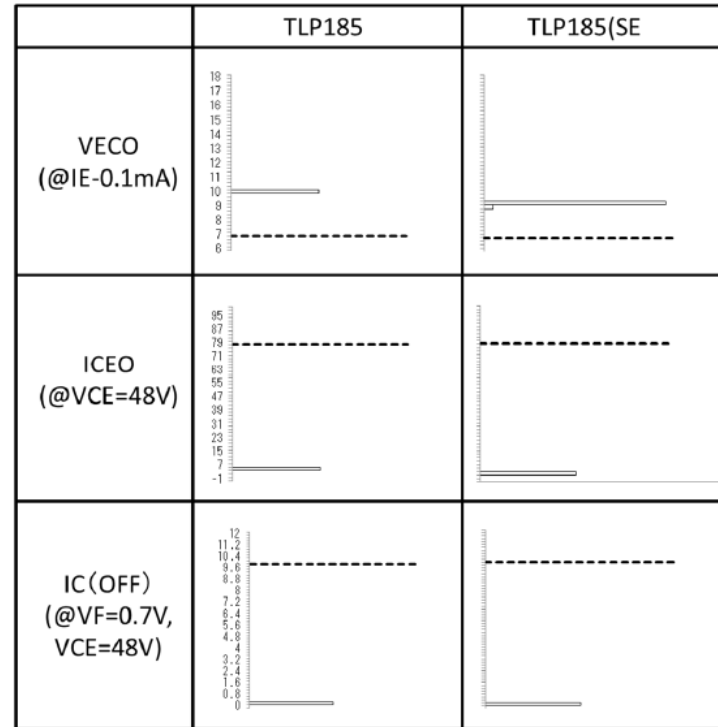
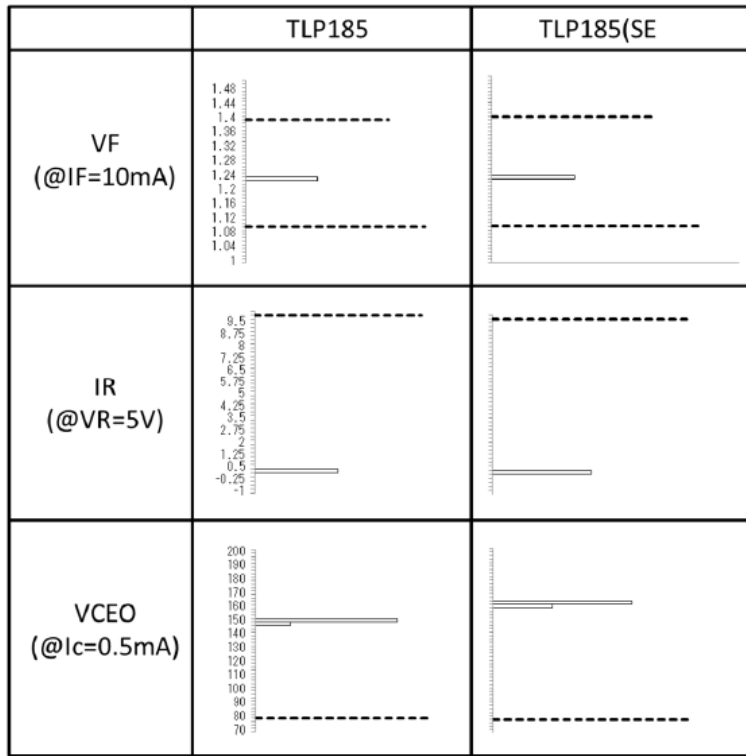
Difference between TLP18x(E and TLP18x(SE

	Frame Design			Specification	
	Input side	Output side	Internal construction	tOFF (typ.) @IF=16mA, Vcc=5V, RL=1.9kΩ	CTR (@IF=5mA, VCE=5V)
TLP184(E				70μs	50 ~ 400%
TLP184(SE				50μs	50 ~ 600%
TLP185(E				70μs	50 ~ 400%
TLP185(SE				40μs	50 ~ 600%

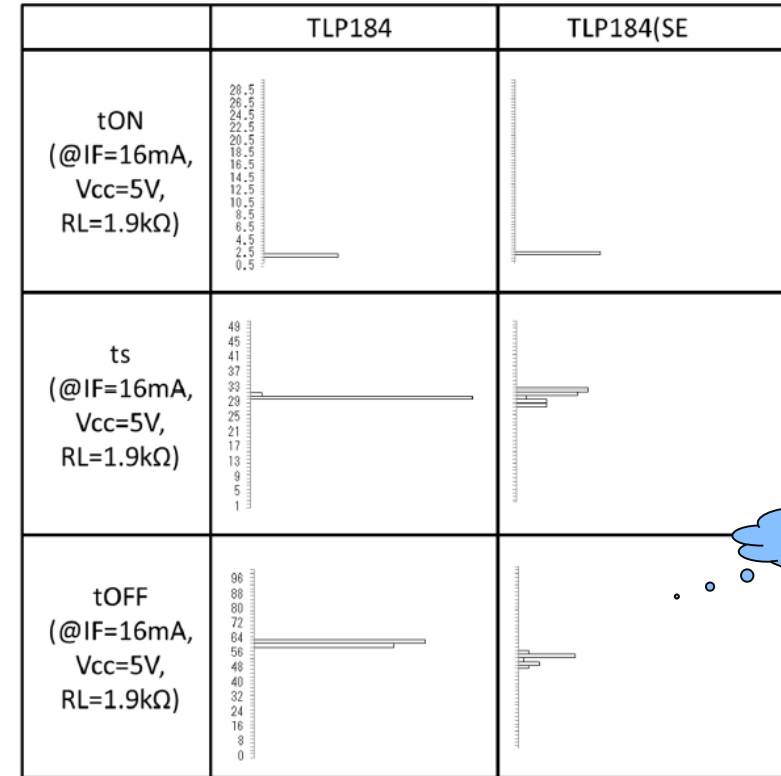
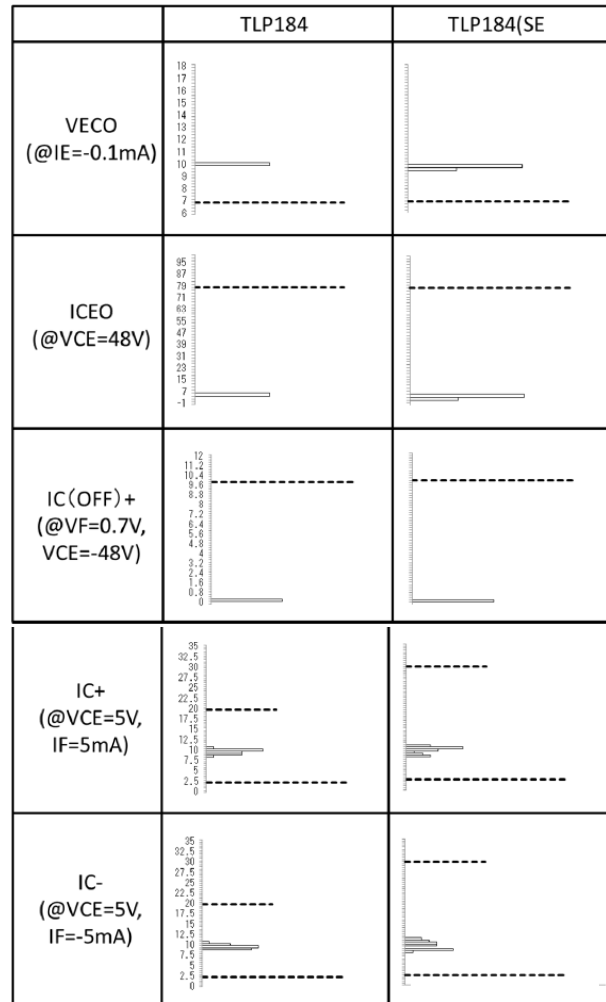
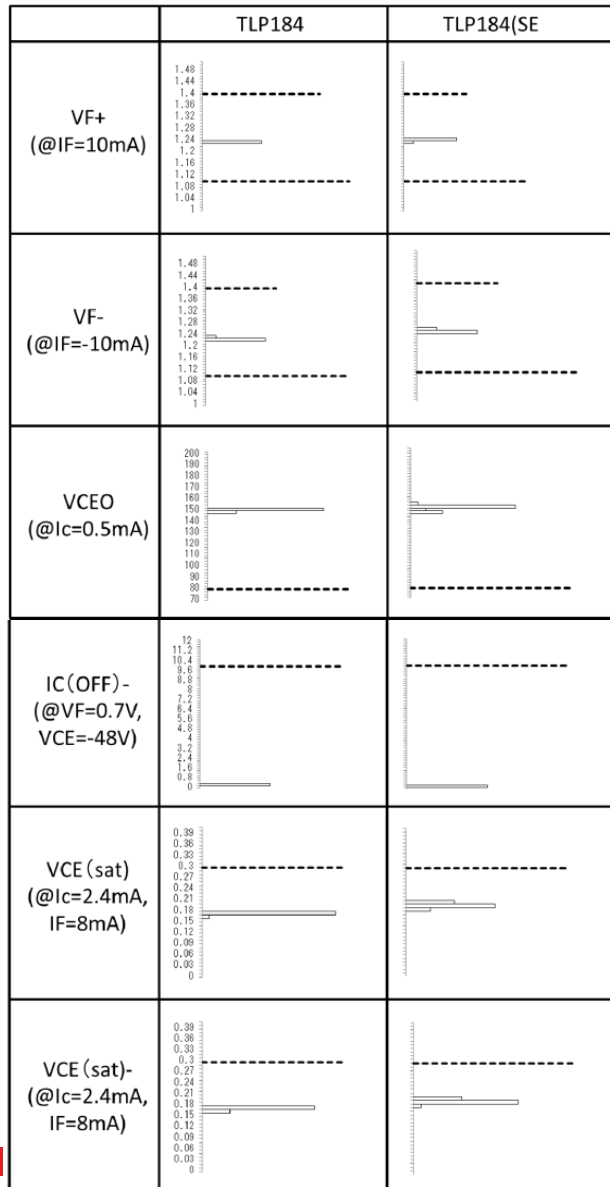
Difference between TLP18x(E and TLP18x(SE – CTR upper limit

CTR rank	TLP184 (AC type)				TLP185 (DC type)			
	TLP184(E		TLP184(SE		TLP185(E		TLP185(SE	
	Min	Max	Min	Max	Min	Max	Min	Max
No rank	50	400	50	600	50	400	50	600
Y	50	150	50	150	50	150	50	150
GR	100	300	100	300	100	300	100	300
BL	-	-	200	600	-	-	200	600
GB	100	400	100	600	100	400	100	600
YH	-	-	-	-	75	150	75	150
GRL	-	-	-	-	100	200	100	200
GRH	-	-	-	-	150	300	150	300
BLL	200	400	200	400	200	400	200	400

Comparison TLP185(E vs. TLP185(SE) (reference data)



Comparison TLP184(E vs. TLP184(SE) (reference data)



improved

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