BRLV30T50BBD

Rev.A .Feb.-2018

DATA SHEET

/ Descriptions

TO-263

Schottky Barrier Diode in a TO-263 Plastic Package.

/ Features

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Low forward voltage drop, low power losses High efficiency operation.

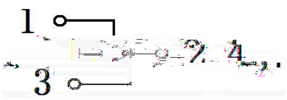
/ Applications

OR-ing

DC-DC

For use in solar cell junction box as a bypass diode for protection,For use in high frequency inverters, switching power supplies, freewheeling diodes,OR-ing diode, dc-to-dc converters and reverse battery protection.

/ Equivalent Circuit



/ Pinning

PIN1 Anode   PIN 2 4 Cathode   PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	V
Maximum RMS Voltage	V_{RMS}	31.5	V
Maximum Average forward current	$I_{F(AV)}$	30	A
Non Repetitive Peak Surge Current	I_{FSM}	350	A
Thermal Resistance Junction to Case	R_{Jc}	1.6	/W
Operating junction and storage temperature range (AC mode)	T_j ,T_{stg}	-65 +150	
Junction temperature in DC forward current without reverse bias, t 1 h	T_j max. (1)	200	

/Notes

1 In accordance with the IEC 61215 Ed.2 bypass diode heating test standard,tested under forward DC condition,no reverse voltage drod was applied,the power up time is less than 1H.bypass diode thermal test DC forward current without reverse bias.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	I_R =500 uA	50			V
Forward Voltage	V_F Note 1	I_F =15A(T_A =25)		0.45	0.50	V
		I_F =30A(T_A =25)		0.50	0.54	V
		I_F =15A(T_A =125)			0.40	V
		I_F =30A(T_A =125)			0.50	V
Instantaneous Reverse Current	I_R Note 2	V_R=45V(T_A =25)			100	A
		V_R=45V(T_A =125)			50	mA

/Notes

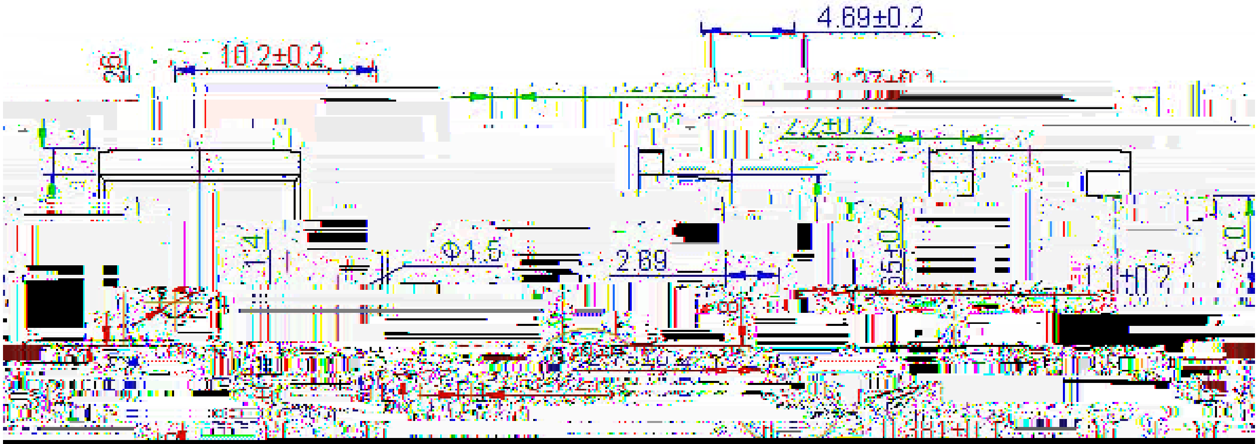
(1) Pulse test: 300 s pulse width, 1 % duty cycle

(2) Pulse test: Pulse width 40 ms

(3)

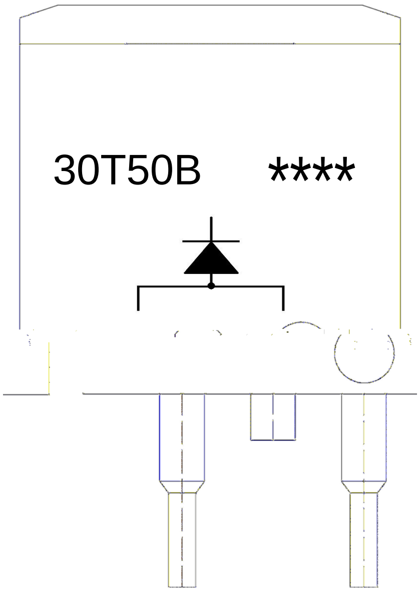
Unless otherwise noted, values for the parameters of a single chip

/ Package Dimensions



± 0.15mm R 0.15mm

/ Marking Instructions



30T50B

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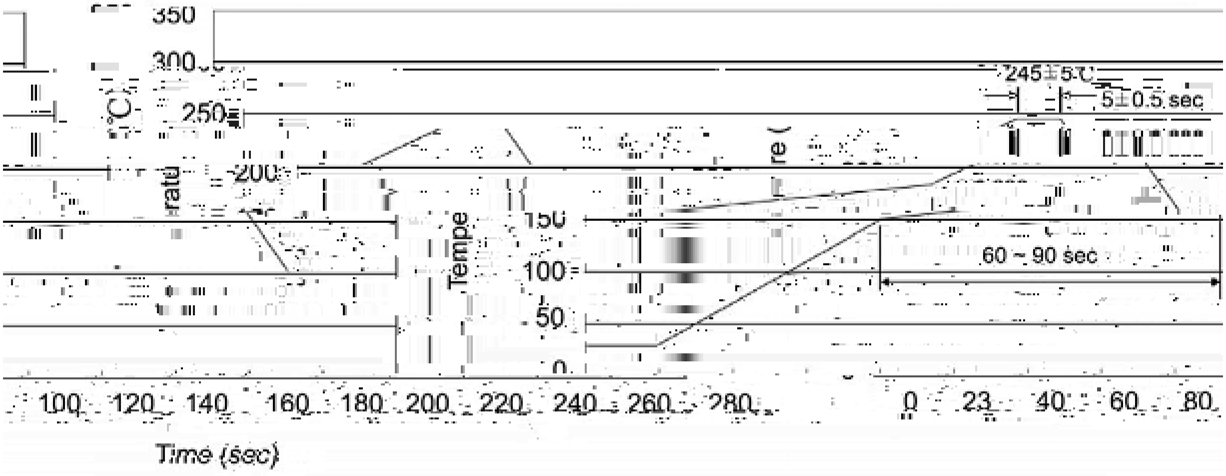
Note:

30T50B	Product Type Code.
	Internal Structure
****:	Lot No. Code, code change with Lot No.

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1 25 150 60 90sec;

2 245±5 5±0.5sec;

3 2 10 /sec.

1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec.

Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ TUBE

Package Type	Units					Dimension (unit mm^3)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box