TO-263

Schottky Barrier Diode in a TO-263 Plastic Package.

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

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.





PIN1 Anode PIN 2 4 Cathode PIN 3 Anode

See Marking Instructions.

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	$R_{\theta Jc}$	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.

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	μA
		V_R=45V(T_A =125)			50	mA

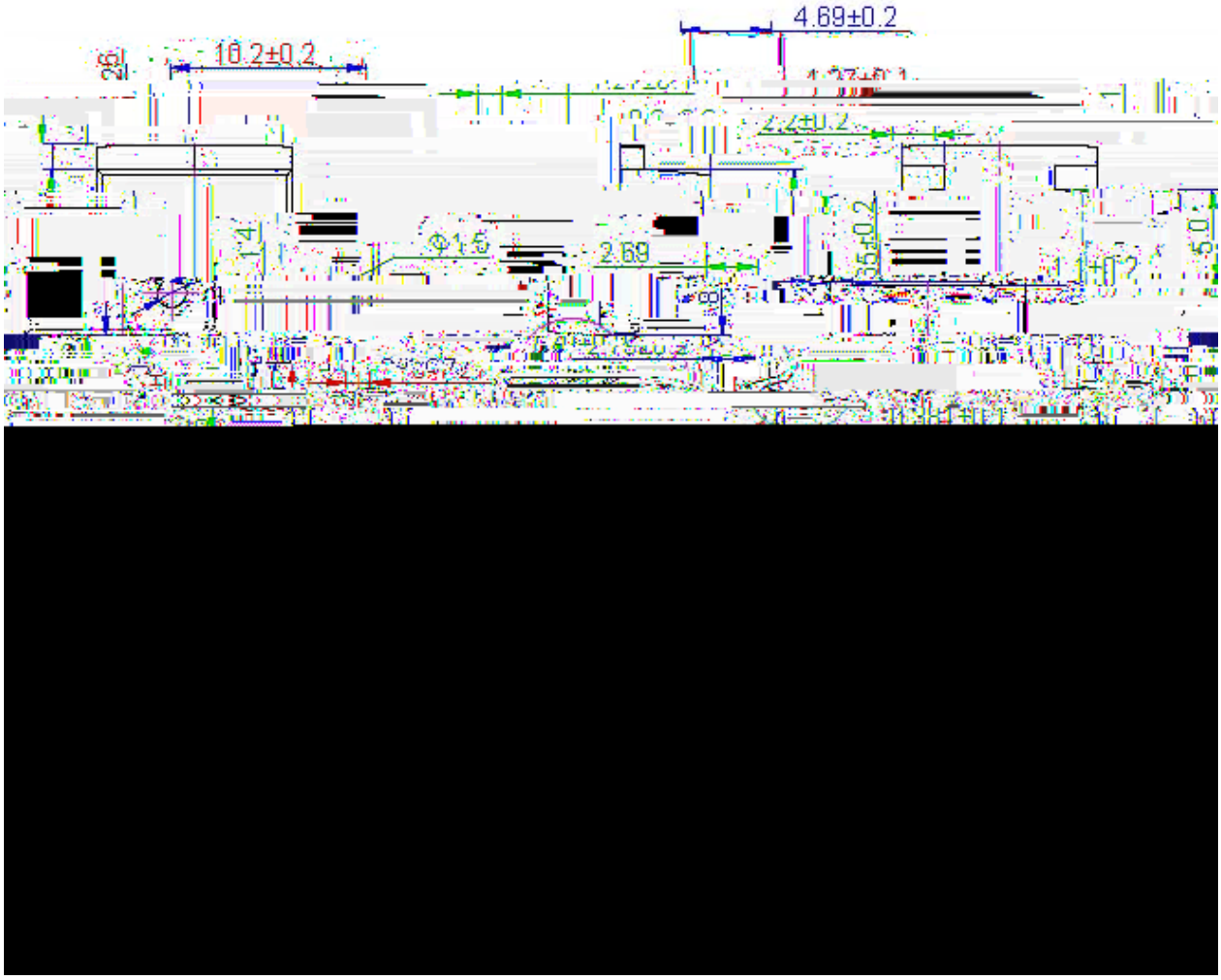
/Notes

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

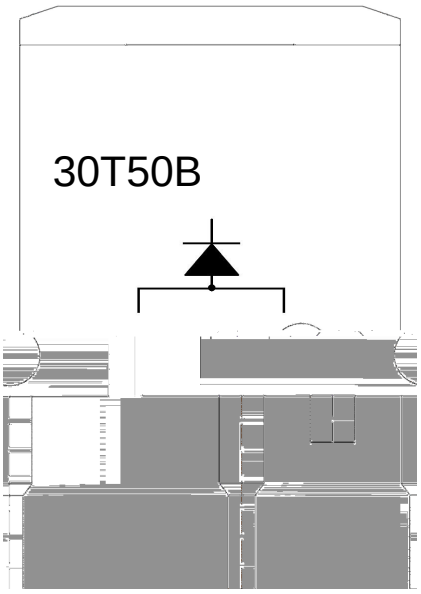
(2) Pulse test: Pulse width ≤ 40 ms

(3)

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



± 0.15mm R 0.15mm



30T50B


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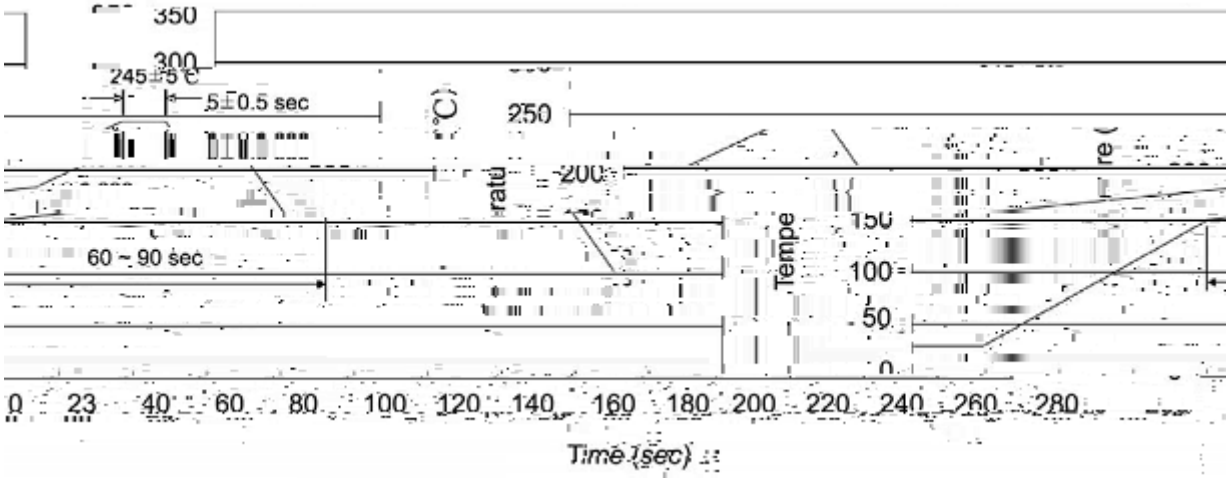
Note:

30T50B Product Type Code.


: Internal Structure

****: Lot No. Code, code change with Lot No.

Temperature Profile for IR Reflow Soldering(Pb-Free)



1	25	150		60	90sec;	Note: 1.Preheating:25~150	, Time:60~90sec.
2	245±5				5±0.5sec;	2.Peak Temp.:245±5	, Duration:5±0.5sec.
3			2	10	/sec.	3. Cooling Speed: 2~10	/sec.

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ TUBE

Package Type	Units	Dimension (unit mm^3)