

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Ideal For Automated Placement
- High Surge Current Capability

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 3): 6°C/W Junction to Case
- Typical Thermal Resistance(Note 3): 15°C/W Junction to Lead
- Typical Thermal Resistance(Note 3): 55°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RTBL610	RTBL610	1000V	700V	1000V

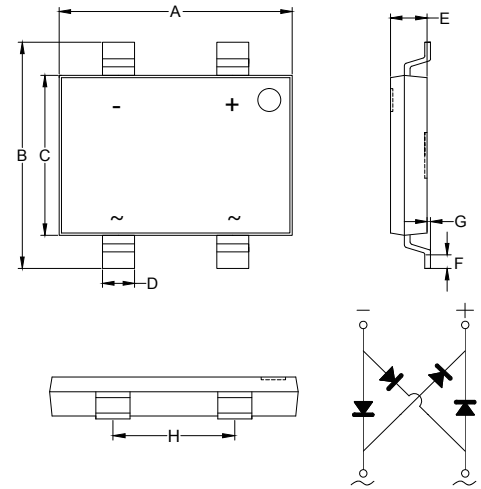
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6.0A	$T_C = 50^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element	V_F	1.30V	$I_{FM} = 3.0\text{A};$ $T_J = 25^\circ\text{C}$ (Note 4)
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 μA	$T_J = 25^\circ\text{C}$
Maximum Reverse Recovery Time	t_{rr}	500ns	$I_F = 0.5\text{A}; I_R = 1.0\text{A};$ $I_{rr} = 0.25\text{A}$
Rating for Fusing	I^2t	93.4A ² S	$t < 8.3\text{ms}$

- Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.
 2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 3. Thermal Resistance Mounted on P.C.B with 30mm*15mm.*1.6mm
 4. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

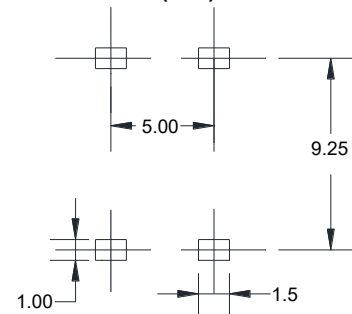
**6 Amp
Fast Recovery
Glass Passivated
Bridge Rectifiers
1000 Volts**

TBL



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.394	0.409	10.00	10.40	
B	0.382	0.398	9.70	10.10	
C	0.268	0.283	6.80	7.20	
D	0.051	0.059	1.30	1.50	
E	0.055	0.071	1.40	1.80	
F	0.020	0.043	0.50	1.10	
G	0.000	0.006	0.00	0.15	
H	0.193	0.201	4.90	5.10	

Suggested Solder Pad Layout (mm)



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

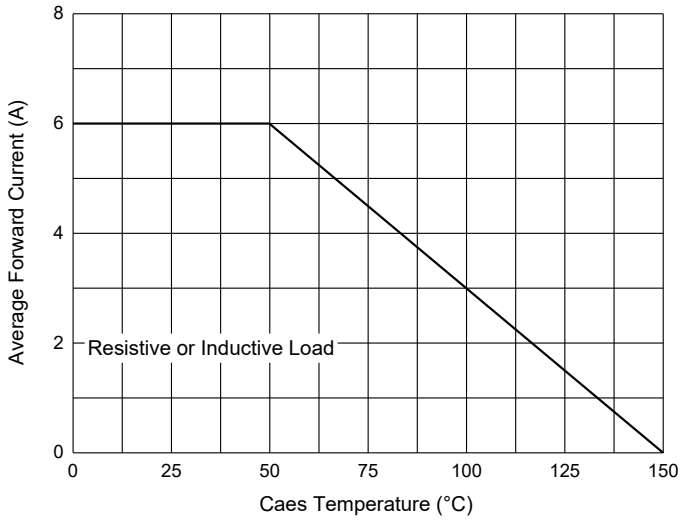


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

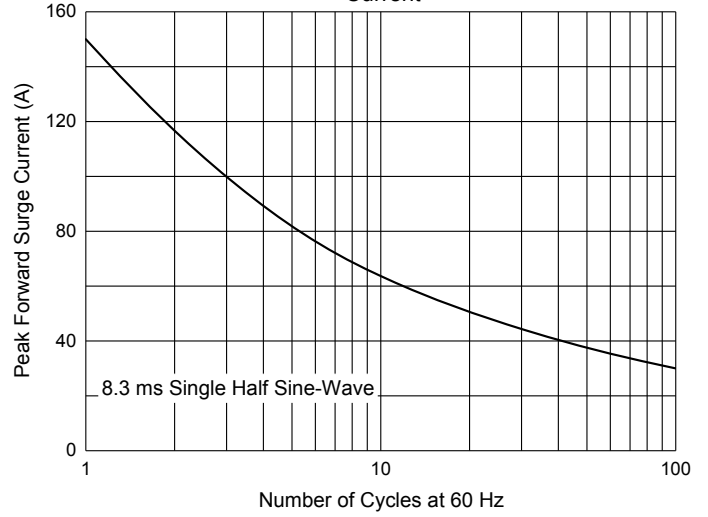


Fig. 3 - Typical Instantaneous Forward Characteristics

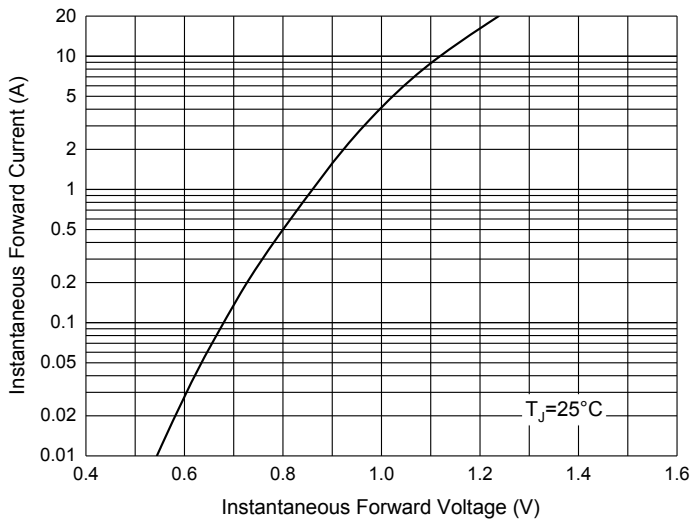
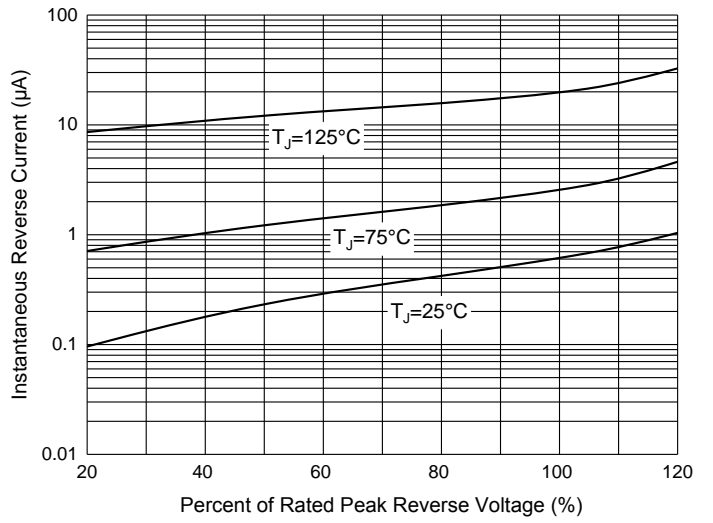


Fig. 4 - Typical Reverse Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:1.8Kpcs/Reel

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