

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): 5°C/W Junction to Case
- Typical Thermal Resistance(Note 3): 10°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
TBL4005	TBL4005	50V	35V	50V
TBL401	TBL401	100V	70V	100V
TBL402	TBL402	200V	140V	200V
TBL404	TBL404	400V	280V	400V
TBL406	TBL406	600V	420V	600V
TBL408	TBL408	800V	560V	800V
TBL410	TBL410	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	4.0A	$T_C = 80^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	120A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element	V_F	0.95V	$I_{FM} = 2.0A$; $T_J = 25^\circ\text{C}$ (Note 4)
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 μA	$T_J = 25^\circ\text{C}$
Rating for Fusing	I^2t	60A ² S	$t < 8.3\text{ms}$

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

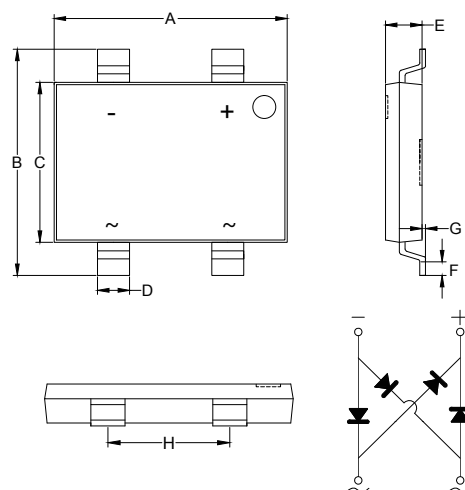
2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

3. Thermal Resistance Mounted on P.C.B with 30mm*15mm.*1.6mm

4. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

4 Amp GLASS PASSIVATED BRIDGE RECTIFIERS 50 to 1000 Volts

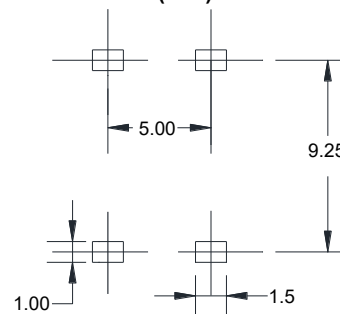
TBL



DIMENSIONS

DIM	INCHES		MM		NOTE
	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

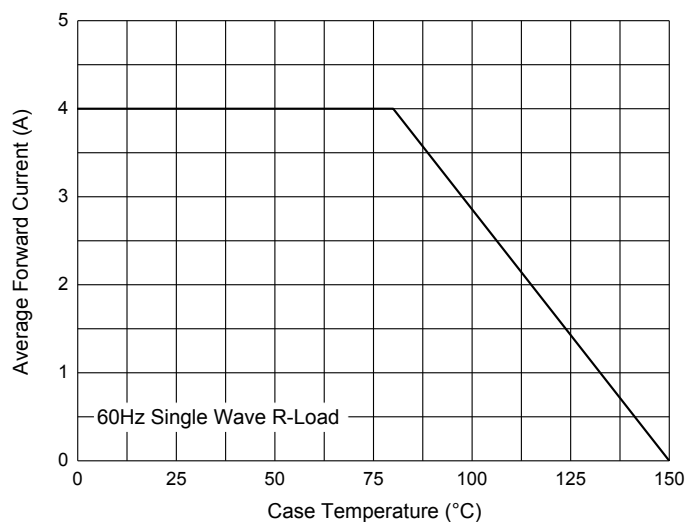


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

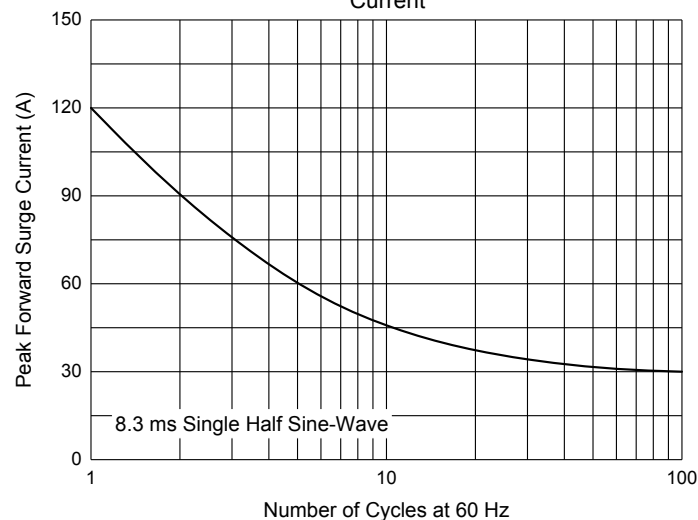


Fig. 3 - Typical Instantaneous Forward Characteristics

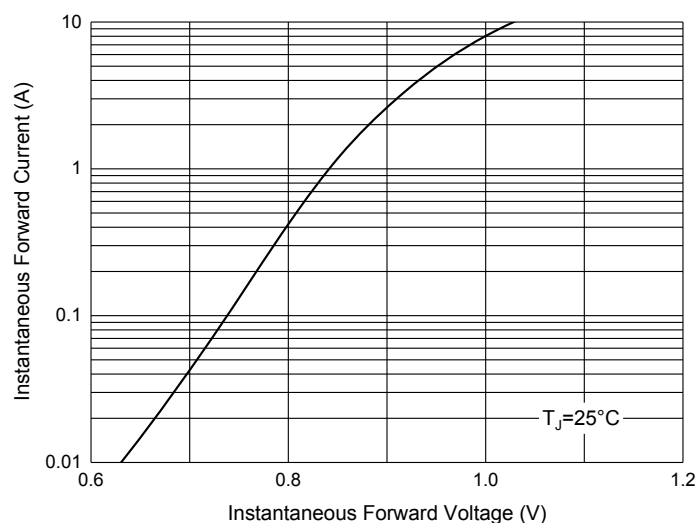
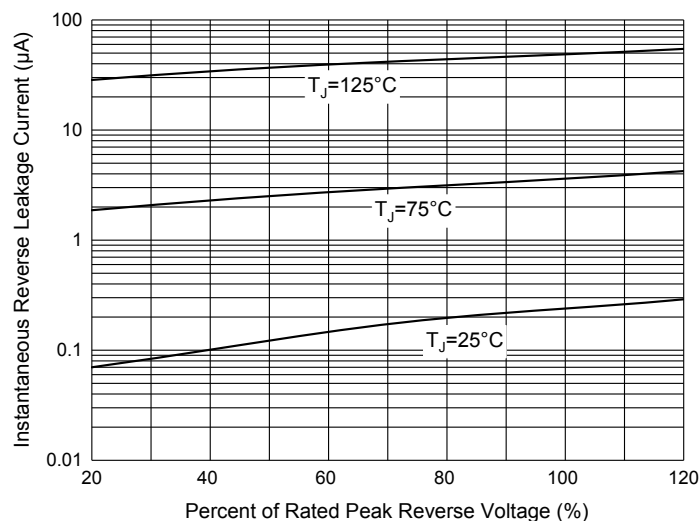


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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