

## Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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
TBL6005	TBL6005	50V	35V	50V
TBL601	TBL601	100V	70V	100V
TBL602	TBL602	200V	140V	200V
TBL604	TBL604	400V	280V	400V
TBL606	TBL606	600V	420V	600V
TBL608	TBL608	800V	560V	800V
TBL610	TBL610	1000V	700V	1000V

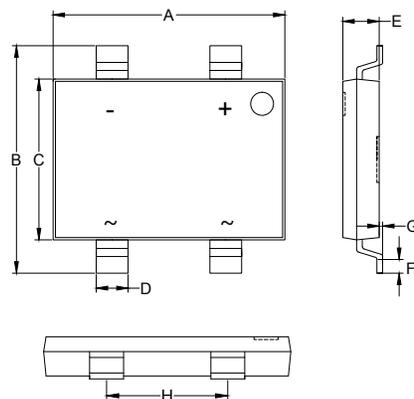
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6.0A	$T_C = 80^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element	$V_F$	0.95V	$I_{FM} = 3.0\text{A};$ $T_J = 25^\circ\text{C}$ (Note 3)
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$	$T_J = 25^\circ\text{C}$
Rating for Fusing	$I^2t$	93.4A <sup>2</sup> S	$t < 8.3\text{ms}$

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.  
2. Thermal Resistance Mounted on P.C.B with 30mm\*15mm.\*1.6mm  
3. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

# 6 Amp GLASS PASSIVATED BRIDGE RECTIFIERS 50 to 1000 Volts

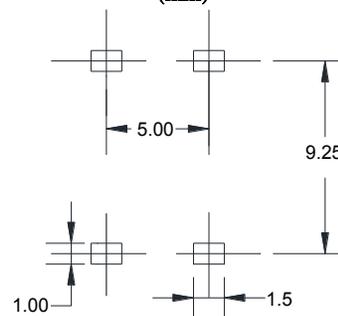
## TBL



### 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

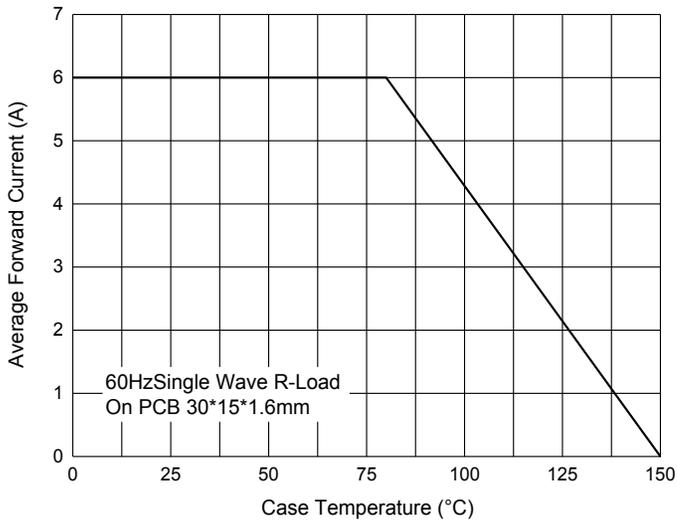


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

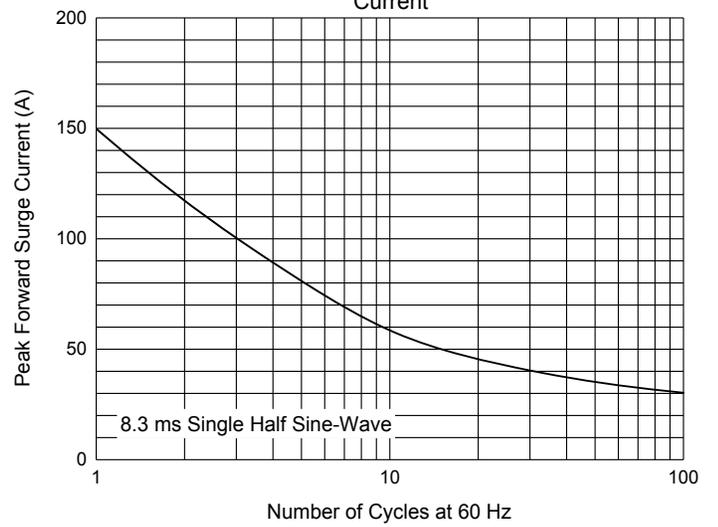


Fig. 3 - Typical Instantaneous Forward Characteristics

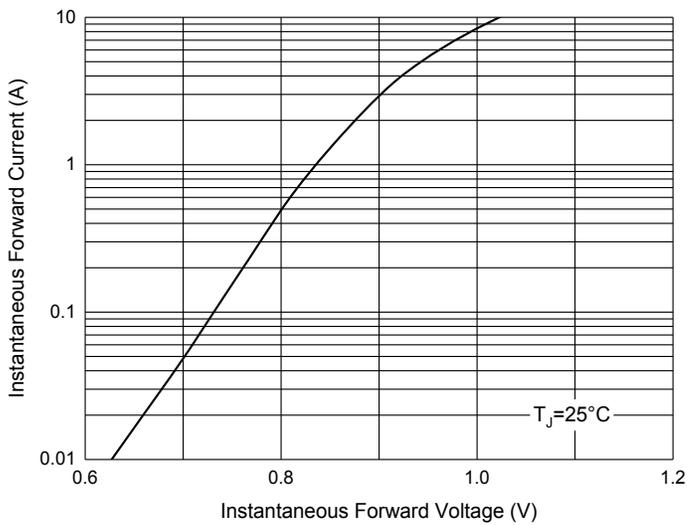
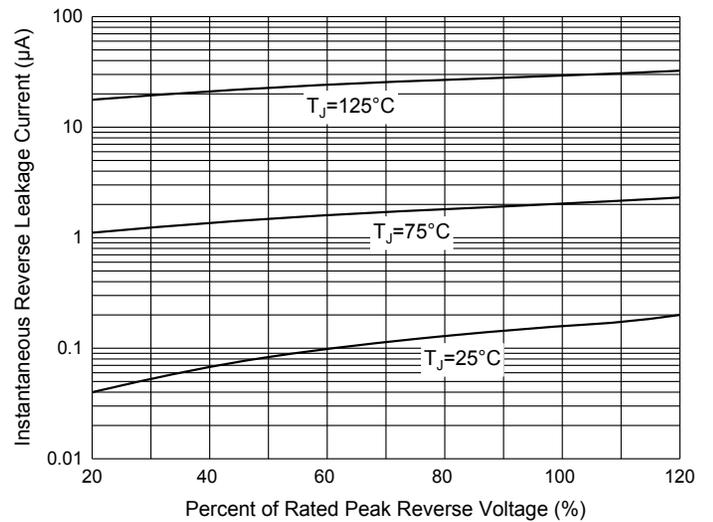


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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