

#### **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
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

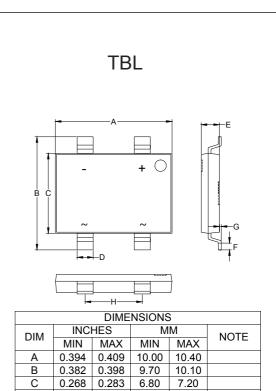
Average Forward Current	I <sub>F(AV)</sub>	4.0A	T <sub>C</sub> = 80°C
Peak Forward Surge Current	I <sub>FSM</sub>	120A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element	V <sub>F</sub>	0.95V	$I_{FM} = 2.0A;$ $T_{J} = 25^{\circ}C \text{ (Note 3)}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5µА	T <sub>J</sub> = 25°C
Rating for Fusing	l²t	60A <sup>2</sup> S	t<8.3ms

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

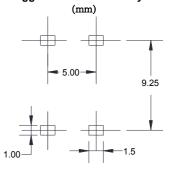
3. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

# 4 Amp **GLASS PASSIVATED BRIDGE RECTIFIERS** 50 to 1000 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOIL
Α	0.394	0.409	10.00	10.40	
В	0.382	0.398	9.70	10.10	
С	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	
Н	0.193	0.201	4.90	5.10	
Н	0.193	0.201	4.90	5.10	

# Suggested Solder Pad Layout





## **Curve Characteristics**

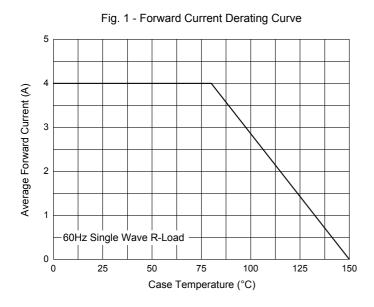


Fig. 3 - Typical Instantaneous Forward Characteristics

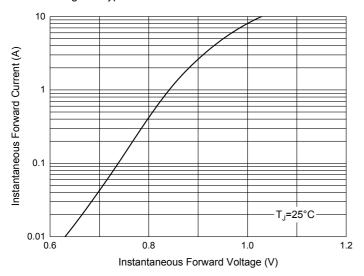


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

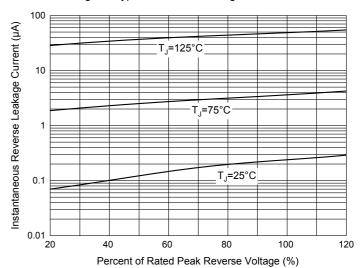
150

90

8.3 ms Single Half Sine-Wave
0
1 10 100

Number of Cycles at 60 Hz

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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