

**Features**

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

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 10°C/W Junction to Case
- Typical Thermal Resistance: 15°C/W Junction to Lead
- Typical Thermal Resistance: 55°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
TBS30A	TBS30A	50V	35V	50V
TBS30B	TBS30B	100V	70V	100V
TBS30D	TBS30D	200V	140V	200V
TBS30G	TBS30G	400V	280V	400V
TBS30J	TBS30J	600V	420V	600V
TBS30K	TBS30K	800V	560V	800V
TBS30M	TBS30M	1000V	700V	1000V

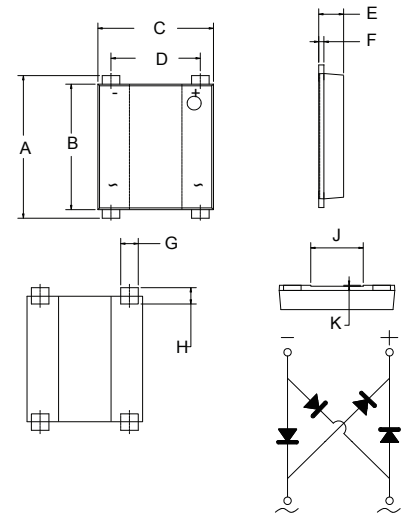
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	3.0A	$T_C = 70^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	95A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	0.95V	$I_{FM} = 1.5A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5µA 100µA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Rating for Fusing	$I^2t$	37A <sup>2</sup> 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.

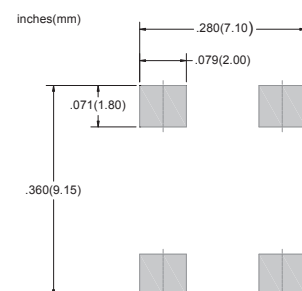
**3.0 Amp  
Single Phase  
Glass Passivated  
Bridge Rectifier  
50 to 1000 Volts**

**TBS**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.311	0.339	7.90	8.60	
B	0.283	0.291	7.20	7.40	
C	0.256	0.264	6.50	6.70	
D	0.197	0.205	5.00	5.20	
E	0.051	0.059	1.30	1.50	
F	0.011	0.016	0.27	0.40	
G	0.037	0.045	0.95	1.15	
H	0.028	0.041	0.70	1.05	
J	0.114	0.122	2.90	3.10	
K	0.0015	0.003	0.04	0.08	

**Suggested Solder Pad Layout**



**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

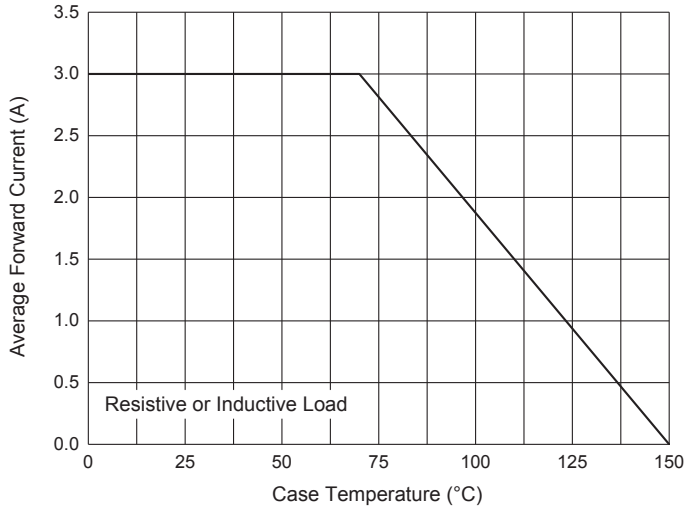


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

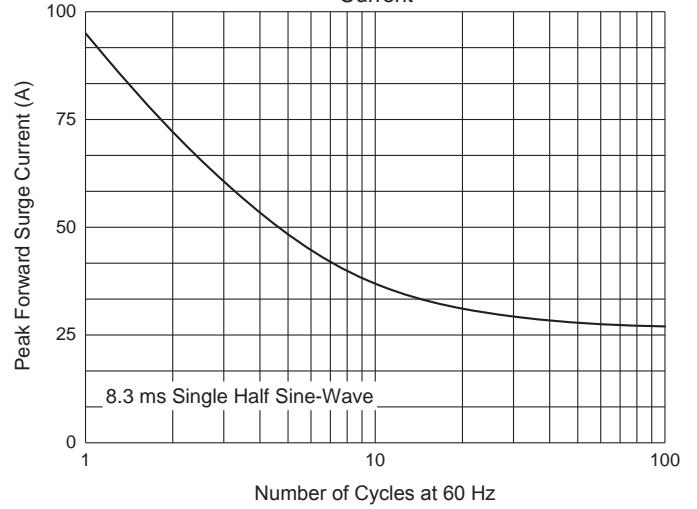


Fig. 3 - Typical Forward Characteristics

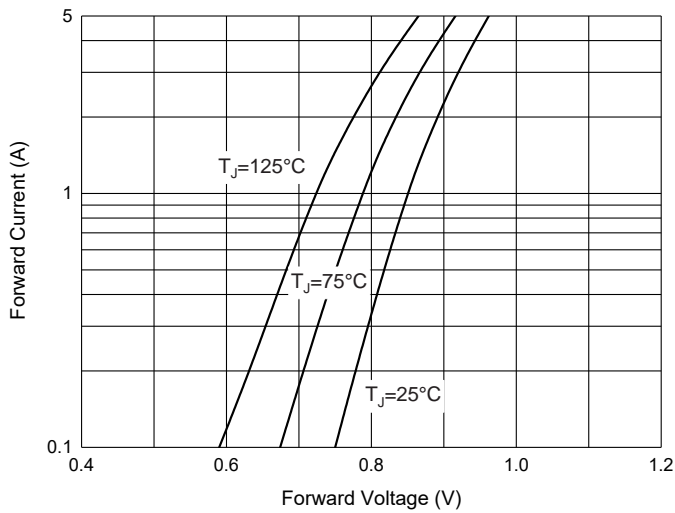
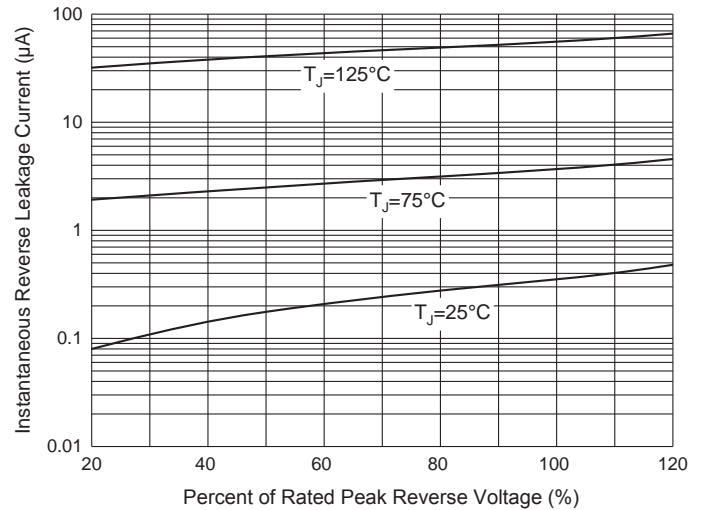


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel;3Kpcs/Reel

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