

## 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
TBS20A	TBS20A	50V	35V	50V
TBS20B	TBS20B	100V	70V	100V
TBS20D	TBS20D	200V	140V	200V
TBS20G	TBS20G	400V	280V	400V
TBS20J	TBS20J	600V	420V	600V
TBS20K	TBS20K	800V	560V	800V
TBS20M	TBS20M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

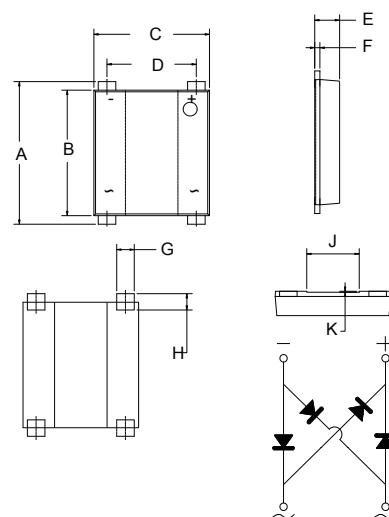
Average Forward Current	$I_{F(AV)}$	2A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	75A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.02V 1.10V	$I_{FM} = 1\text{A}$ $I_{FM} = 2\text{A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Rating for Fusing	$I^2t$	23A <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.

# 2 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

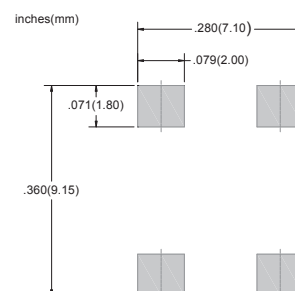
## TBS



## DIMENSIONS

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

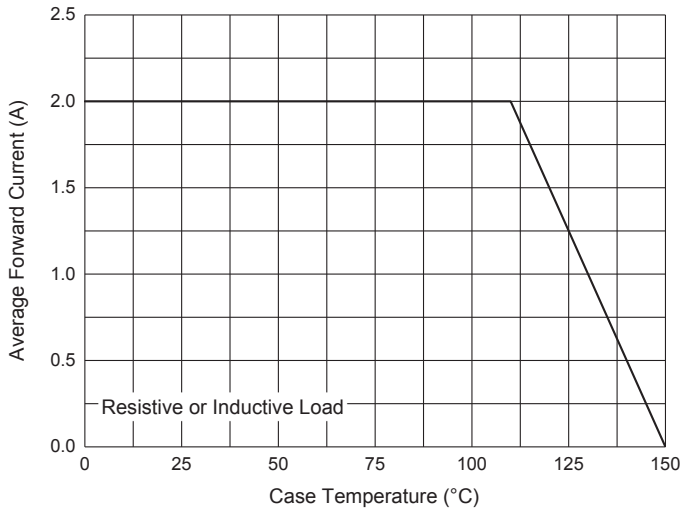


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

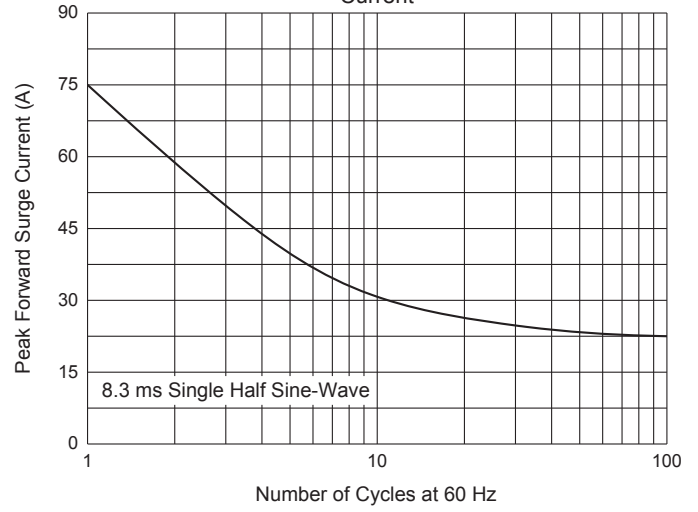


Fig. 3 - Typical Instantaneous Forward Characteristics

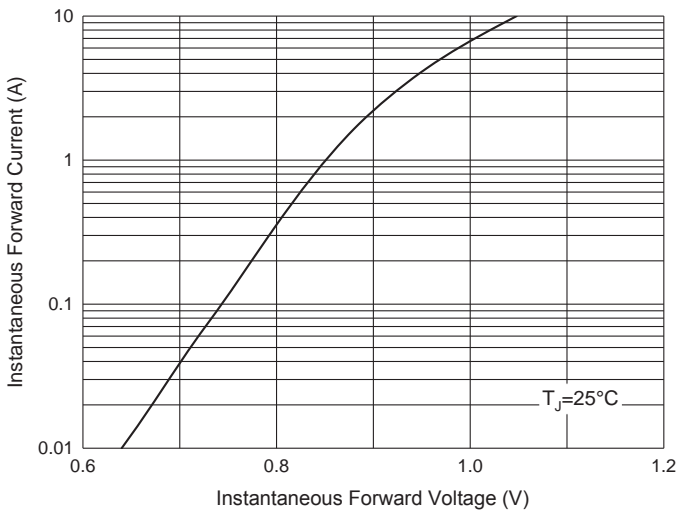


Fig. 4 - Typical Reverse Leakage Characteristics

