

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
RTBS30M	RTBS30M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

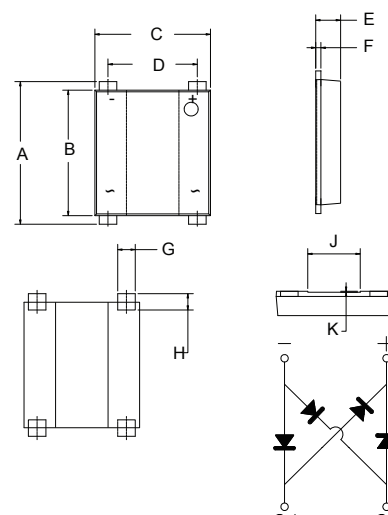
Average Forward Current	$I_{F(AV)}$	3.0A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	90A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	$I_{FM} = 1.5A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 μA 100 μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Rating for Fusing	I^2t	33.6A ² S	1ms ≤ t < 8.3ms
Maximum Reverse Recovery Time	t_{rr}	350nS	IF=0.5A; IR=1.0A; Irr=0.25A
Typical Junction Capacitance	C_J	38pF	Measured at 1.0MHz, VR=4.0V

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.

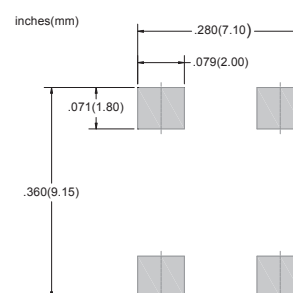
3.0 Amp Fast Recovery Glass Passivated Bridge Rectifier 1000 Volts

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

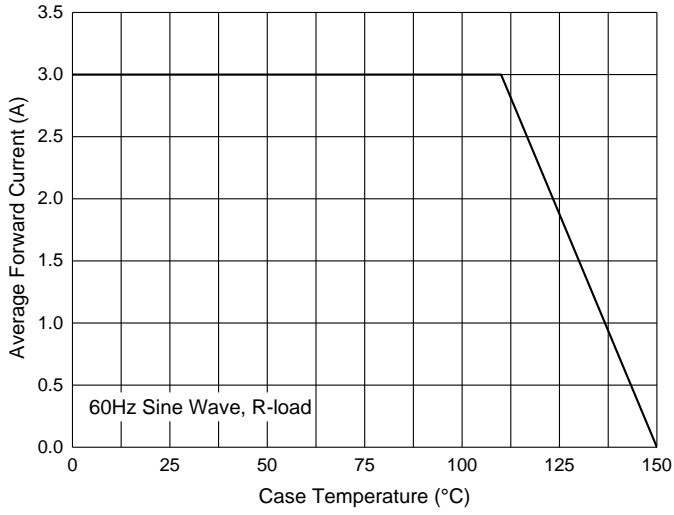


Fig. G- Maximum Non-Repetitive Peak Forward Surge Current

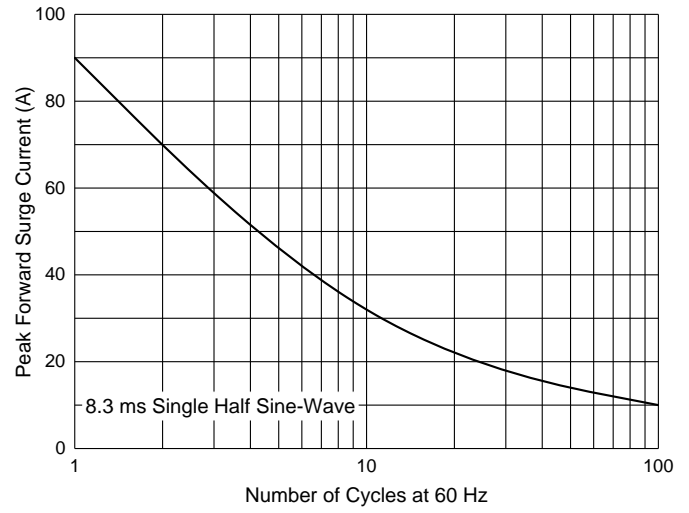


Fig. 3 - Typical Instantaneous Forward Characteristics

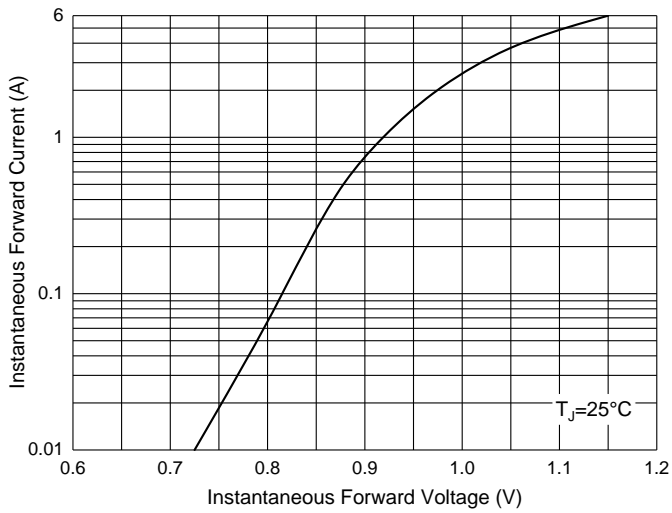
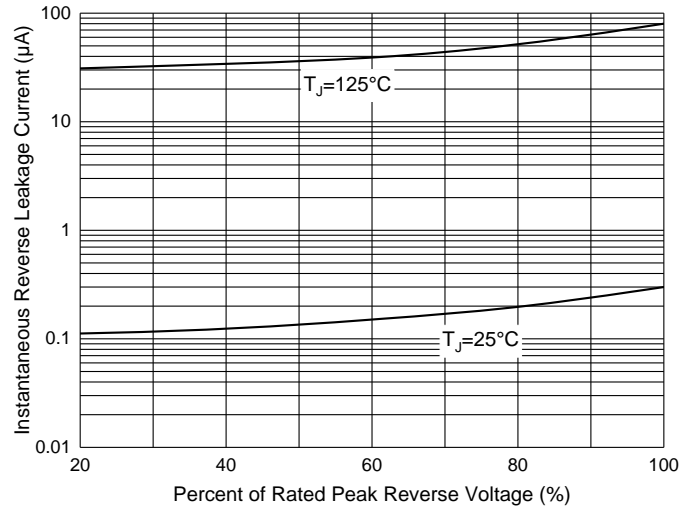


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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