

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

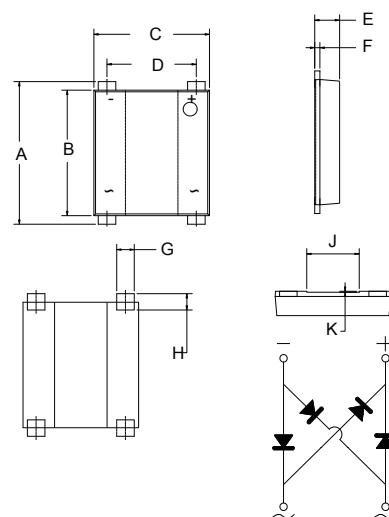
| | | | |
|---|-------------|--------------------|--|
| Average Forward Current | $I_{F(AV)}$ | 2A | $T_C = 110^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 75A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.02V 1.10V | $I_{FM} = 1\text{A}$ $I_{FM} = 2\text{A}$ $T_J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

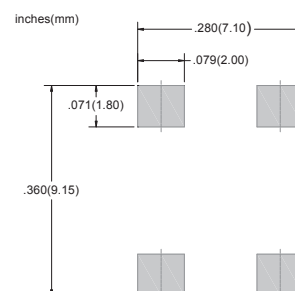
TBS



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

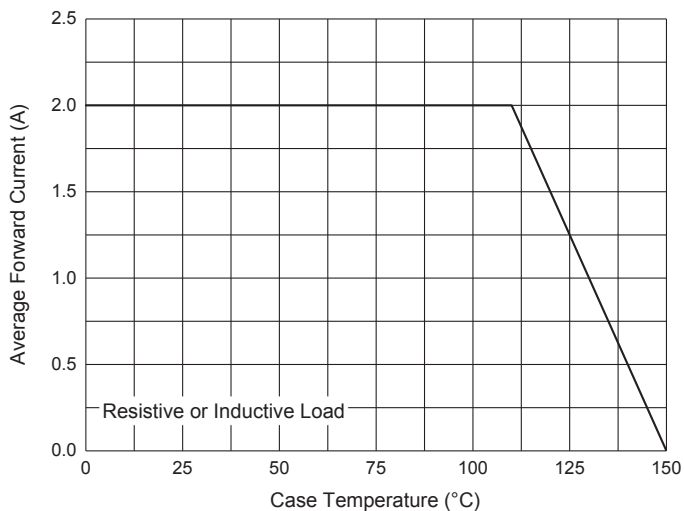


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

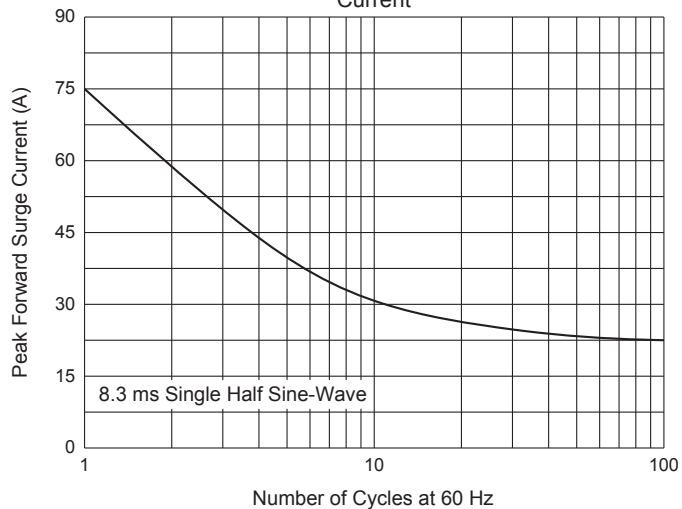


Fig. 3 - Typical Instantaneous Forward Characteristics

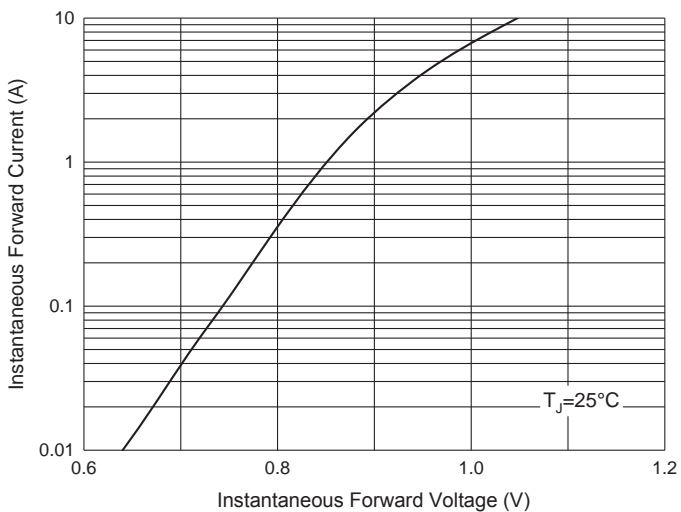
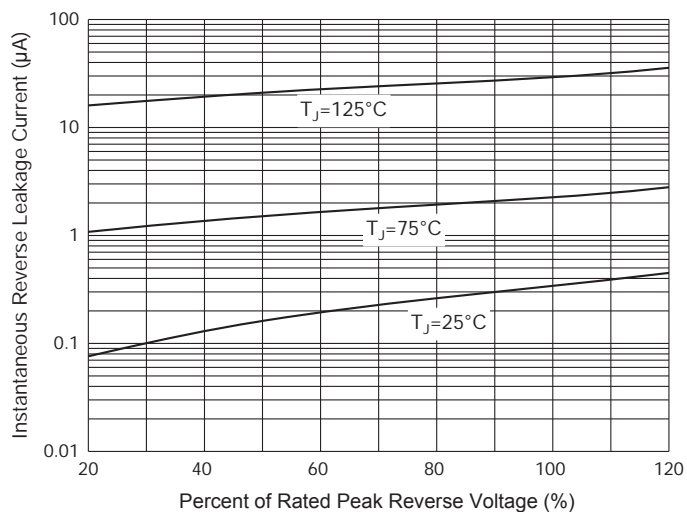


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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