

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- · Schottky Barrier Rectifier
- · Guard Ring Protection
- Low Forward Voltage
- · High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"

2.0 Amp Schottky Barrier Rectifier 80 to 100 Volts

Maximum Ratings

- Operating Junction Temperature Range: -50°C to +125°C
- Storage Temperature Range: -50°C to +125°C
- Maximum Thermal Resistance: 35°C/W Junction to Ambient

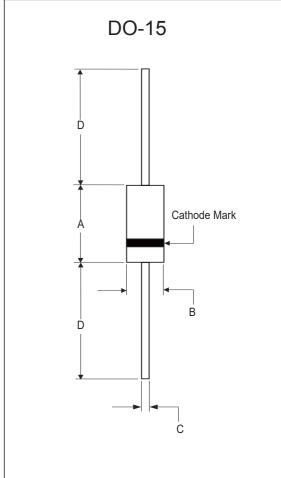
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|---|---------------------------|-----------------------------------|
| SB280 | SB280 | 80V | 56V | 80V |
| SB2010 | SB2010 | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 2.0A | T _L =75°C |
|---------------------------------|--------------------|--------|---|
| Maximum Surge Current | I _{FSM} | 50A | 8.3ms,Half Sine |
| Max Peak Forward Voltage | V _{FM} | 0.85V | I _{FM} =2.0A; T _J =25°C* |
| Max Peak Reverse Current | I _{RM} | 0.01mA | V _{RRM} , T _J =25°C |
| Typical Junction Capacitance | CJ | 170pF | V _R =4.0V f=1.0MHz |

^{*}Pulse test: Pulse width 300 μsec , Duty cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.



| DIMENSIONS | | | | | | | |
|------------|--------|-------|-------|------|------|--|--|
| DIM | INCHES | | MM | | NOTE | | |
| Dilvi | MIN | MAX | MIN | MAX | NOTE | | |
| Α | 0.230 | 0.300 | 5.80 | 7.60 | | | |
| В | 0.104 | 0.140 | 2.60 | 3.60 | | | |
| С | 0.026 | 0.035 | 0.70 | 0.90 | | | |
| D | 1.000 | | 25.40 | | | | |



Curve Characteristics

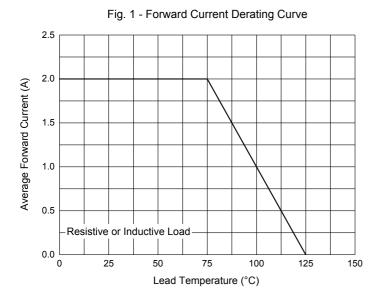


Fig. 3 - Typical Instantaneous Forward Characteristics

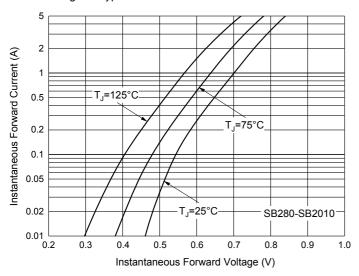


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

50

40

40

20

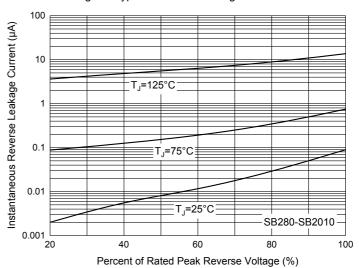
8.3 ms Single Half Sine-Wave

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: 4Kpcs/Reel | | |
| Part Number-AP | Ammo Packing: 3Kpcs/Ammo Box | | |
| Part Number-BP | Bulk: 25Kpcs/Carton | | |

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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