

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 100 Volts FORWARD CURRENT - 3.0 Ampere

SMB

FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Very Low forward voltage drop
- · High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequence inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

• Case: Molded plastic

Polarity: Indicated by cathode bandWeight: 0.002 ounces, 0.064 grams

A A DE LE

| Dim. | Min. Max. | |
|------------------------------|-----------|------|
| Α | 4.06 | 4.75 |
| В | 3.30 | 3.94 |
| С | 1.96 | 2.21 |
| D | 0.15 | 0.31 |
| E | 5.00 | 5.59 |
| F | | 0.20 |
| G | 2.00 | 2.50 |
| Н | 0.76 | 1.52 |
| All Dimensions in millimeter | | |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | в3100в | UNIT |
|---|--------------------|--------------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 100 | V |
| Maximum RMS Voltage | V _{RMS} | 70 | V |
| Maximum DC Blocking Voltage | V _{DC} | 100 | V |
| Maximum Average Forward Rectified Current $@T_L=100^\circ$ | C I(AV) | 3.0 | A |
| Peak Forward Surge current 8.3ms single half sine-wave super imposed on rated load (JEDEC Metho | I _{FSM} | 100 | А |
| Maximum forward Voltage @T _J =25°C at 3.0A DC @T _J =100 | l V _F l | 0.79 0.69 | V |
| Maximum DC Reverse Current @T _J =25°0 at Rated DC Blocking Voltage @T _J =100 | _प ा | 0.01 20 | m A |
| Typical Junction Capacitance (Note 1) | CJ | 120 | pF |
| Typical Thermal Resistance (Note 2) | R _{∂Л} | 22 | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | °C |
| Storage Temperature Range | TSTG | -55 to +150 | °C |

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Unit mounted on 0.75t glass-epoxysubstrate with 2x3 mm copper pad.

REV.0, 01.-Oct-2013

