



# B120 Thru B160

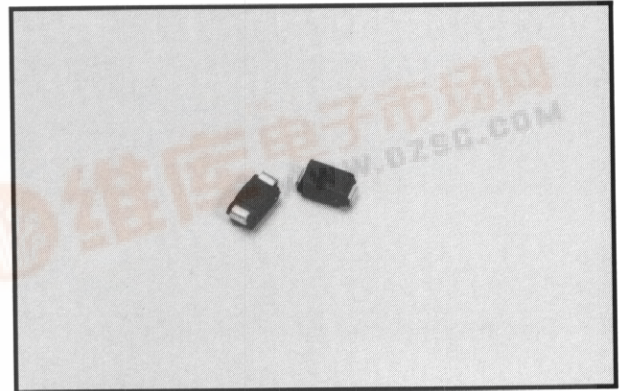
## 1 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### FEATURES

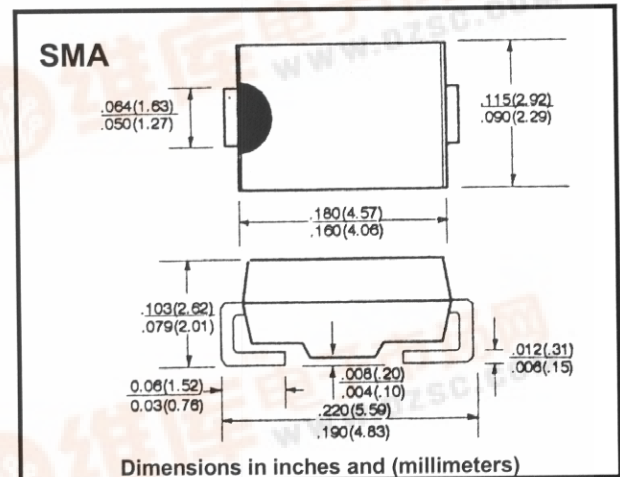
- For surface mount applications
- Metal semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- UL recognized 94V-O plastic material
- Lead solderable per MIL-STD-202 Method 208
- Surge overload rating to 30A peak

### Mechanical Data

- Case: Molded plastic
- Polarity: Indicated on cathode
- Weight: 0.002 ounces, 0.064 grams



### Outline Drawing



### Maximum Ratings & 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%

		B120	B130	B140	B150	B160	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Input Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Output Current .375" 9.5mm lead length @ T <sub>L</sub> = 100°C	I (AV)	1.0					A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	30					A
Maximum Forward Voltage Drop At 1.0A	V <sub>F</sub>	0.50			0.70		V
Maximum Reverse Current At Rated @ T <sub>A</sub> = 25°C	I <sub>R</sub>	0.5					mA
DC Blocking Voltage per Bridge Element @ T <sub>A</sub> = 100°C		1.0					mA
Typical Junction Capacitance *(See Note)	C <sub>J</sub>	110					pF
Maximum Thermal Resistance**(See Note)	R <sub>(THJL)</sub>	10					°C/W
Operating Temperature Range	T <sub>J</sub>	-65 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150					°C

Note: \*Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

\*\*Thermal resistance junction to lead, measured on PC board 5mm<sup>2</sup> X (0.013mm thick)