



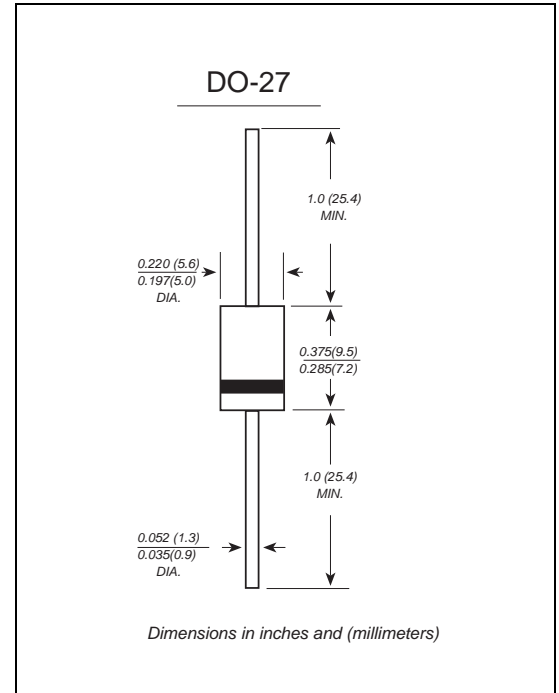
SB320L/SR320L~SB3100L/SR3100L 3.0Amp Schottky Barrier Rectifiers

Features

- ◆ Low forward voltage drop
- ◆ Low power loss,high efficiency
- ◆ Construction utilizes void-free molded plastic technique
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds,0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

Case: JEDEC DO-27 molded plastic body
 Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting Position: Any
 Weight : 0.04 ounce, 1.10 grams



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 current derate by 20%.

| | SYMBOLS | SB320L SR320L | SB340L SR340L | SB360L SR360L | SB3100L SR3100L | UNITS |
|--|-----------------|---------------------------|------------------|------------------|--------------------|-------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 40 | 60 | 100 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 14 | 28 | 42 | 70 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 20 | 40 | 60 | 100 | VOLTS |
| Maximum average forward rectified current 0.375" (9.5mm) lead length(see fig.1) | $I_{(AV)}$ | 3.0 | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 80.0 | | | | Amps |
| Maximum instantaneous forward voltage at 3.0A | V_F | $T_A=25^\circ C$ 0.40 | 0.45 | 0.55 | 0.70 | Volts |
| | | $T_A=125^\circ C$ 0.35 | 0.40 | 0.50 | 0.62 | |
| Maximum DC reverse current at rated DC blocking voltage | I_R | $T_A=25^\circ C$ 1.0 | | | 0.5 | mA |
| | | $T_A=125^\circ C$ 50.0 | | | 20.0 | |
| Typical junction capacitance (NOTE 1) | C_J | 150 | | | | pF |
| Typical thermal resistance (NOTE 2) | $R_{\theta JA}$ | 30 | | | | °C/W |
| Operating junction temperature range | $T_{J,}$ | -50 to +125 | | | | °C |

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length,P.C.B. mounted

Ratings And Characteristic Curves

SB320L/SR320L~SB3100L/SR3100L

FIG. 1- FORWARD CURRENT DERATING CURVE

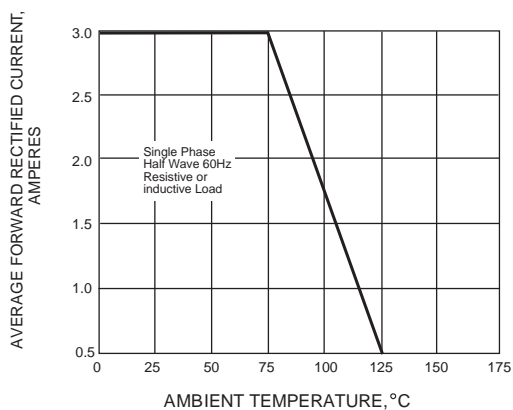


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

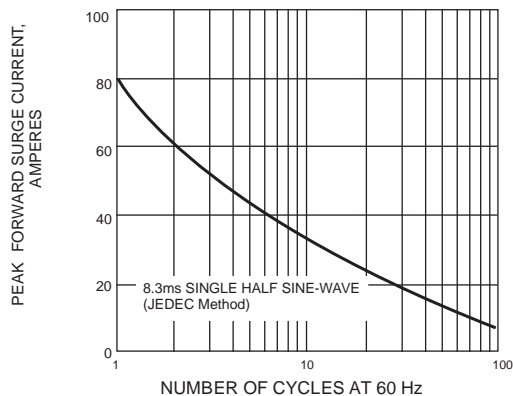


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

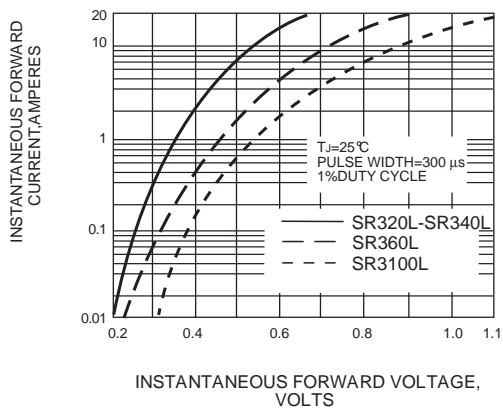


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

