B5100BL

SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE 100 Volts FORWARD CURRENT 5 Amperes

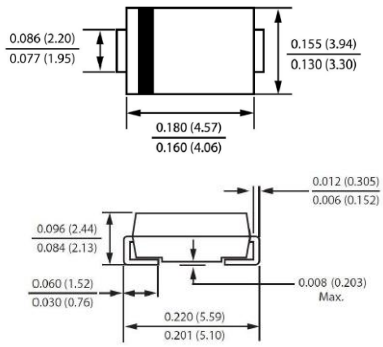
FEATURES

- Low profile surface mount package
- Built in strain relief
- High switching speed
- Low voltage drop, high efficiency
- Guardring for over voltage protection

MECHANICAL DATA

- Case: SMB , molded plastic
- Polarity: Color band denotes cathode

SMB

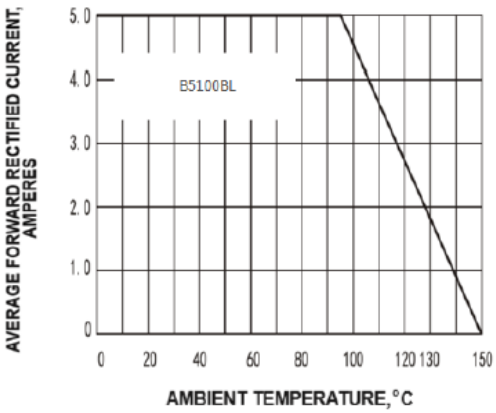


Dimensions in inches and (millimeters)

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	B5100BL	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum Instantaneous Forward Voltage @ 5A	V_F	0.7	V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	I_R	0.3 10	mA
Maximum Average Forward Rectified Current	I_F	5	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	120	A
Typical Junction Capacitance	C_J	350	pF
Typical Thermal Resistance	$R_{\theta JA}$	25	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
StorageTemperature Range	T_{STG}	-55 to +150	°C

Rating and Characteristic Curves



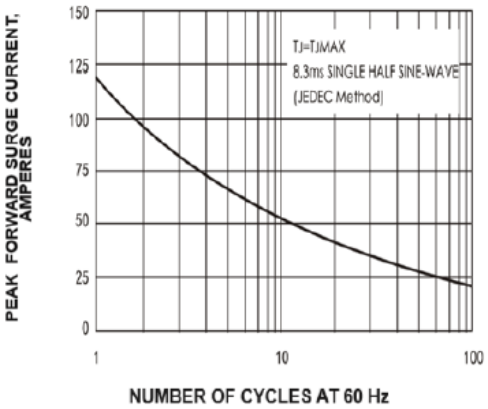


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

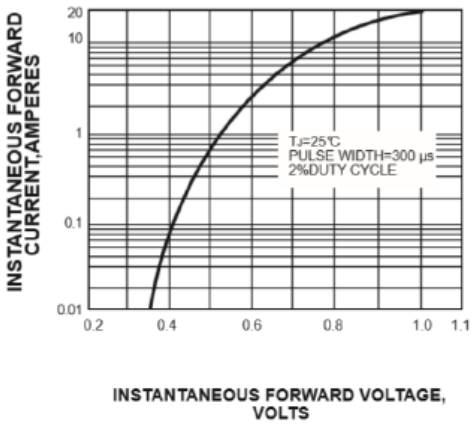


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

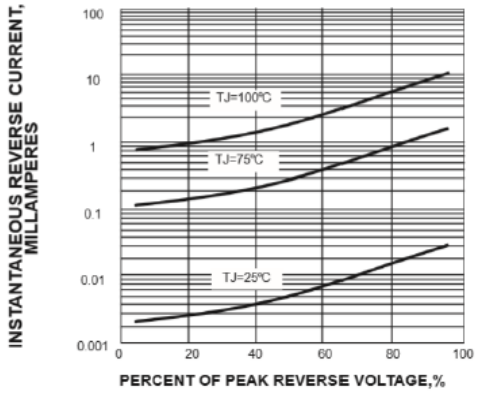


FIG. 5-TYPICAL JUNCTION CAPACITANCE

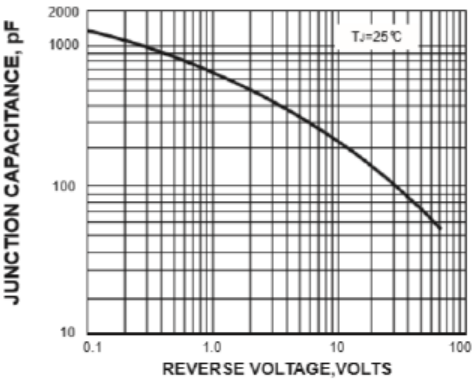
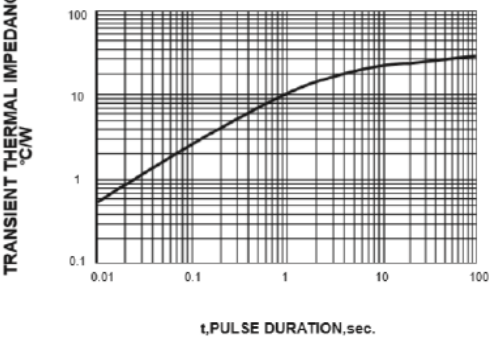



FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE