



SMAL320 THRU SMAL3100

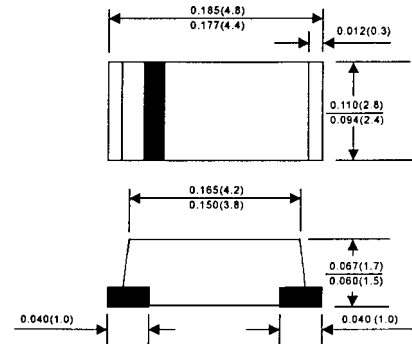
3A LOW PROFILE SCHOTTKY BARRIER RECTIFIER

FEATURES

- Low leakage current
- Low profile package
- Low power loss-high efficiency
- Majority carrier conduction
- UL 94V-0 flame retardant epoxy molding compound

MECHANICAL DATA

- Case : Molded plastic
- Terminals : Solderable per MIL-STD-750, method 2026
- Polarity : Cathode band
- Mounting position : Any
- Weight : 0.195 grams



CASE-SMA

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

CHARACTERISTICS	SYMBOL	SMAL 320	SMAL 330	SMAL 340	SMAL 350	SMAL 360	SMAL 380	SMAL 3100	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	I_F				3.0				A
Maximum Overload Surge 8.3ms Single Half Sine-Wave	I_{FSM}				80				A
Typical Junction Capacitance (Note 1)	C_J				250				pF
Typical Thermal Resistance	$R_{\theta JA}$				80				°C/W
Operating Temperature Range	T_{OP}				-65 TO +125				°C
Storage Temperature Range	T_{STG}				-65 TO +150				°C
Maximum Forward Voltage @ $I_F=3.0A$ (Note 2)	V_F	0.50			0.70		0.80		V
Maximum Reverse Current at $T_A=25^\circ C$	I_R				0.5				mA
Maximum Reverse Current at $T_A=100^\circ C$	I_R				10				mA
Marking Code		SS32	SS33	SS34	SS35	SS36	SS38	S310	

NOTE :

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V
2. Pulse test: pulse width = 300 μ s. Duty cycle = 1%.

RATINGS AND CHARACTERISTIC CURVE SMAL320 THRU SMAL3100

Fig. 1 - Forward Current Derating Curve

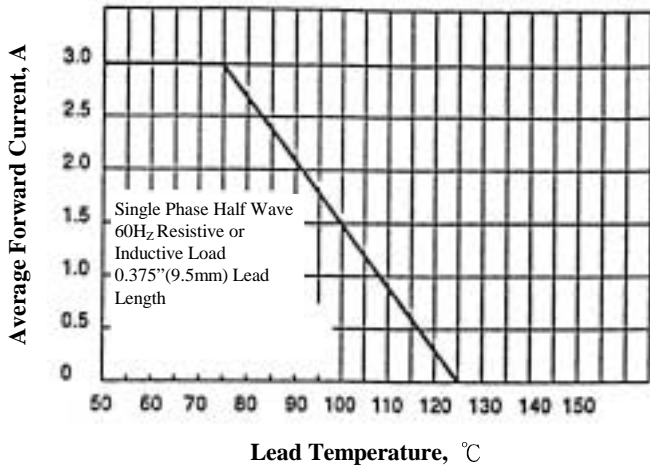


Fig. 2 - Typical Instantaneous Forward Characteristics

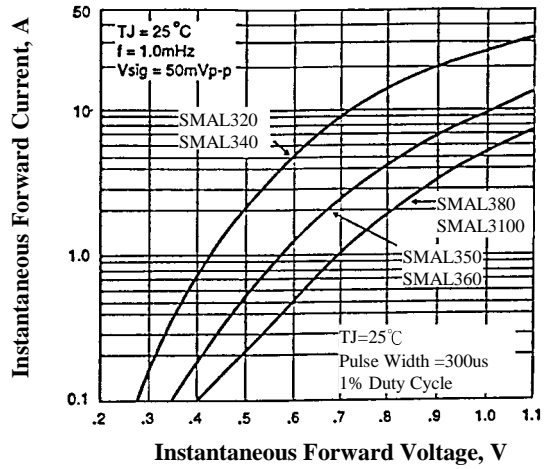


Fig. 3 - Typical Junction Capacitance

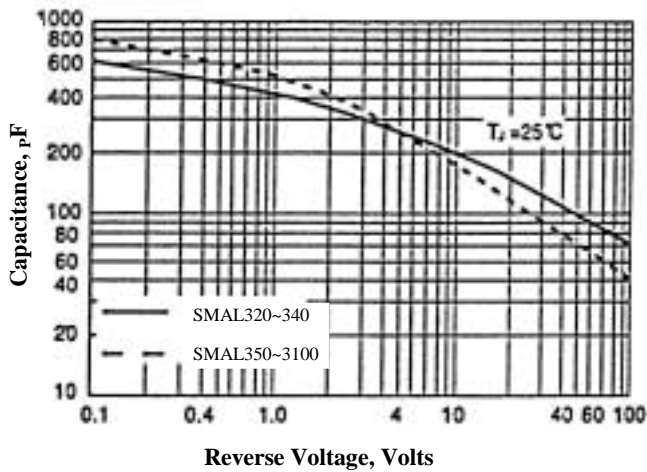


Fig. 4 - Non-Repetitive Peak Forward Surge Current

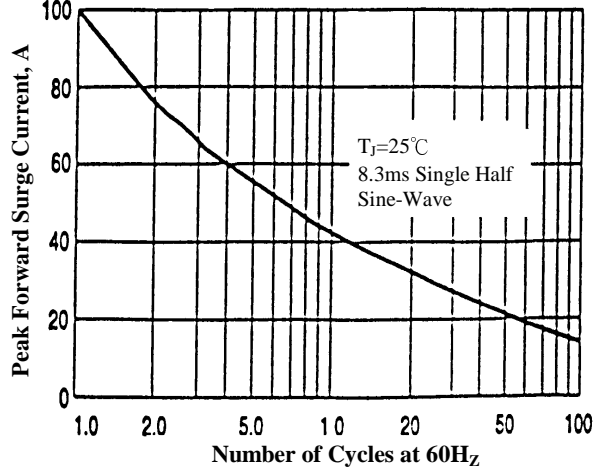


Fig. 5 - Typical Reverse Characteristics

