

SM5819W



1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

FEATURES

- * High Current Capability
- * Extreme low thermal Resistance
- * For surface Mount Application
- * Low forward voltage
- * Higher Temp soldering :250°C for 10 Seconds At Terminals

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202 method 208 guaranteed,
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Marking code : **BM** **SL**

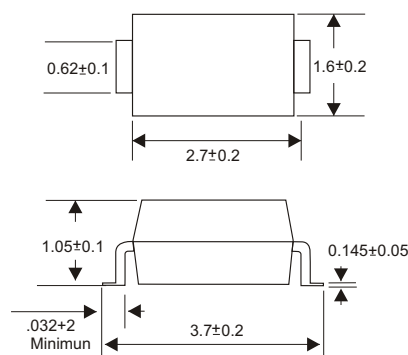
VOLTAGE RANGE

40 Volts

CURRENT

1.0 Ampere

SOD-123



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM5819W	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current		
See Fig. 1	1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	40	A
Maximum Instantaneous Forward Voltage at 1.0A	0.6	V
Maximum DC Reverse Current Ta=25°C	1.0	mA
at Rated DC Blocking Voltage Ta=100°C	10	mA
Typical Junction Capacitance (Note1)	110	pF
Typical Thermal Resistance R _{JA} (Note 2)	426	°C/W
Operating Temperature Range T _J	-40 — +125	°C
Storage Temperature Range T _{STG}	-40 — +135	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (SM5819W)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

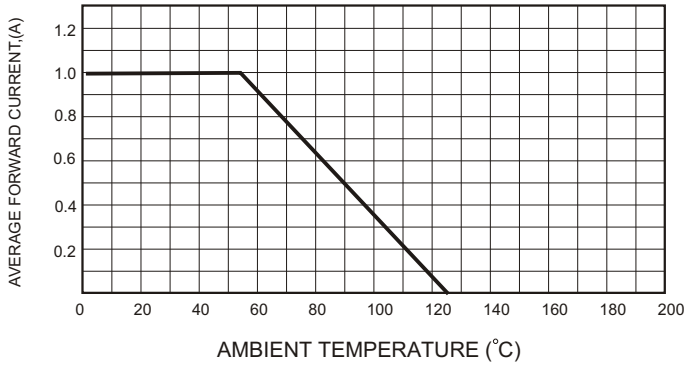


FIG.2-TYPICAL FORWARD CHARACTERISTICS

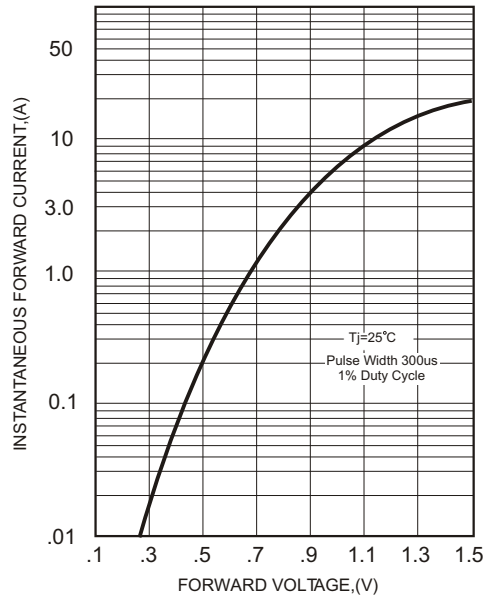


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

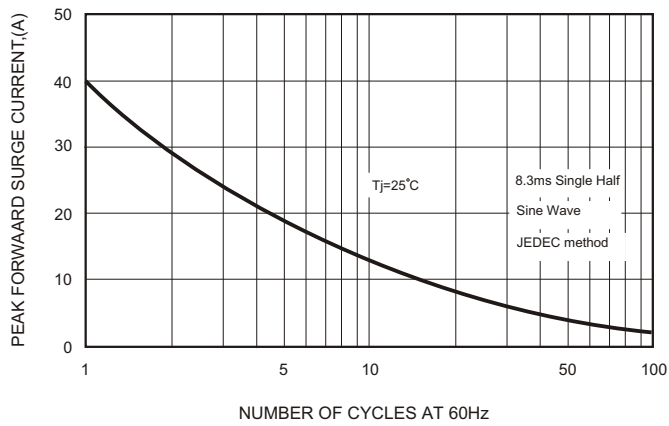


FIG.4-TYPICAL JUNCTION CAPACITANCE

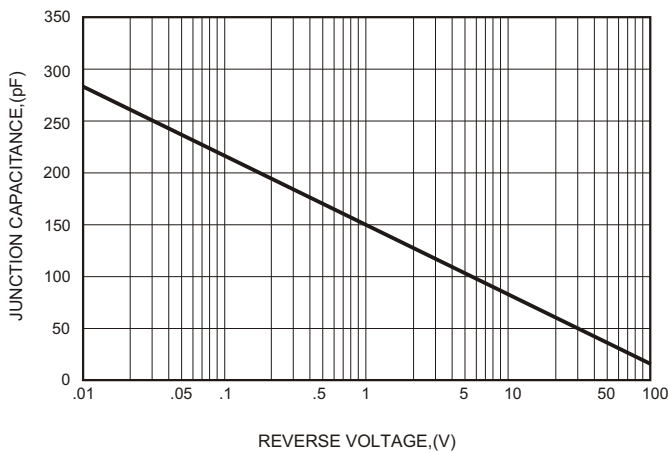


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

