

SM5817 THRU SM5819

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 40 Volts

CURRENT - 1.0 Ampere

FEATURES

- * High current capability
- * Ideal for surface mounted applications
- * Low leakage current for high efficiency

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.12 gram

SM-1(DO-213AB)

SOLDERABLE ENDS

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SM5817	SM5818	SM5819	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	Volts
Maximum RMS Voltage	VRMS	14	21	28	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	Volts
Maximum Average Forward Rectified Current at AT= 90°C	IO	1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	25			Amps
Maximum Instantaneous Forward Voltage at 1.0A DC	VF	.50	.55	.60	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ TA= 25°C	IR	1.0		mAmps
	@ TA= 100°C		10		
Typical Thermal Resistance (Note 1)	R θ JA	75			°C / W
Typical Junction Capacitance (Note 2)	CJ	110			pF
Storage Operating Temperature Range	TJ,TSTG	-65 to + 125			°C

NOTES : 1. Thermal Resistance (Junction to Ambient), .24in² (6.0mm²) copper pads to each terminal.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SM5817 THRU SM5819)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

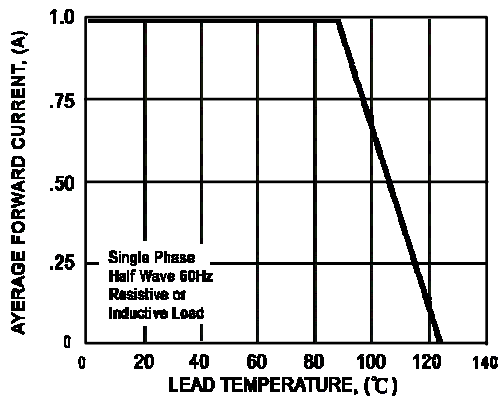


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

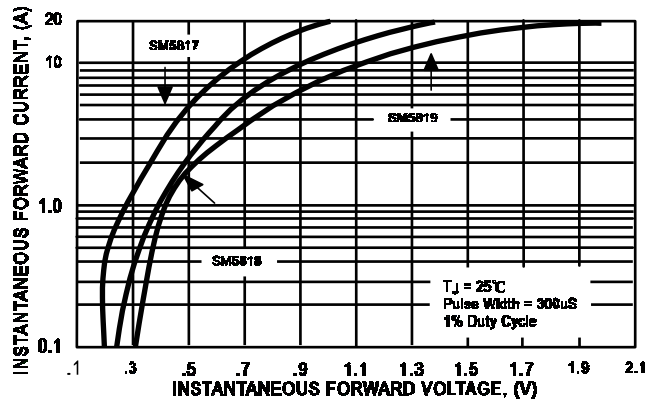


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

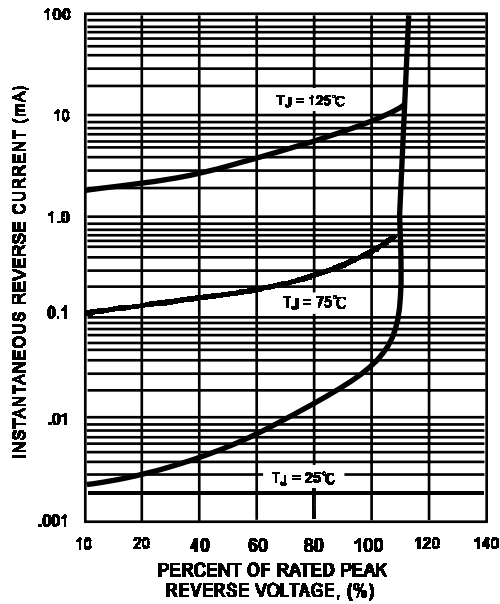


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

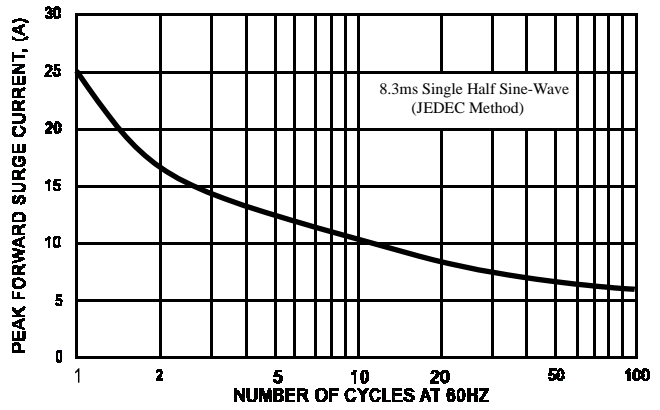


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

