



**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
S5817 THRU S5819**

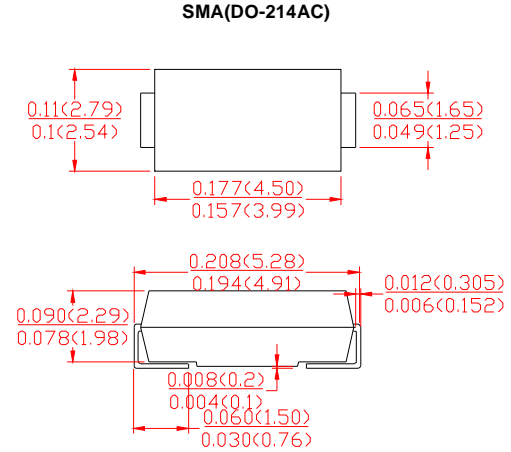
**VOLTAGE RANGE 20 to 40 Volts
Forward Current 1.0 Amperes**

FEATURES

- I Plastic package has Unerwrites Laboratory Flammability Classification 94V-0
- I For surface mount applications
- I Metal to silicon rectifier. Majority carrier conduction
- I Low power loss, high efficiency
- I High current capability, Low forward Voltage drop
- I High surge capability
- I For use in low voltage, high frequency inverters, Free wheeling, and polarity protection applications
- I High temperature soldering guaranteed: 260 °C/10 seconds at terminals

MECHANICAL DATA

- I Case: JEDED DO-214AC molded plastic.
- I Terminal: Solder Plated solder able per MIL-STD-750,method 2026
- I Polarity: Color band denotes cathode end
- I Weight: 0.002 ounce. 0.064gram



All Dimension in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

	Symbols	S5817	S5818	S5819	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at $T_L=110^{\circ}C$	$I_{(AV)}$	1.0			Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25			Amps
Maximum Forward Voltage at 1.0A D.C. Maximum Forward Voltage at 3.0A D.C.	V_F	0.45 0.75	0.55 0.775	0.60 0.90	Volts
Maximum DC Reverse Current(Note 1) at Rated DC blocking voltage	$T_A=25^{\circ}C$	I_R			mA
	$T_A=125^{\circ}C$	20.0			
Maximum Thermal Resistance (Note 1)	R_{QJL}	20			$^{\circ}C/W$
Typical Junction Capacitance(Note 2)	C_J	65			pF
Operating Junction Temperature Range	T_J	-65°C to +125°C			$^{\circ}C$
Storage temperature range	T_{STG}	-65°C to +150°C			$^{\circ}C$

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient



RATINGS AND CHARACTERISTIC CURVES S5817 THRU S5819

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

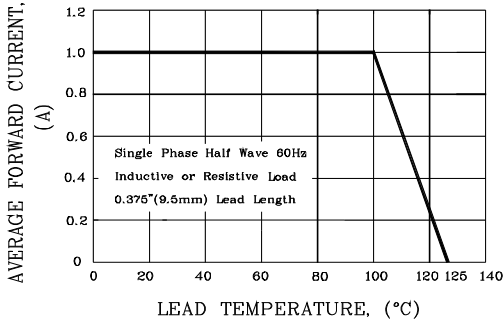


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

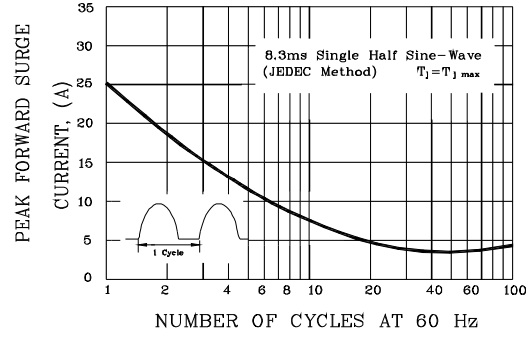


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

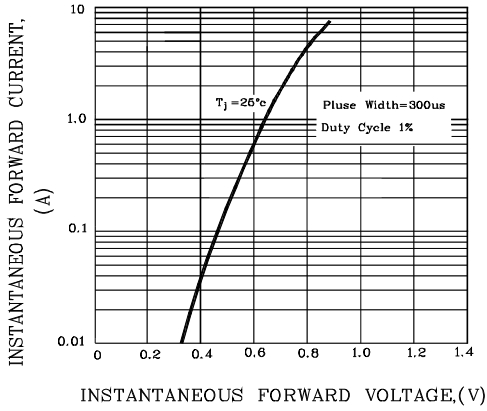


FIG.4-TYPICAL REVERSE CHARACTERISTICS

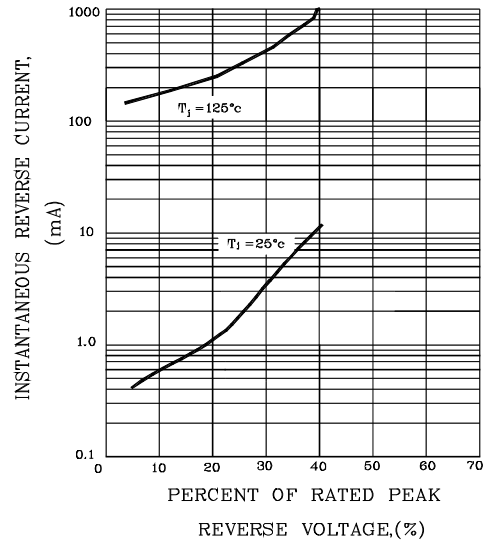


FIG.5-TYPICAL JUNCTION CAPACITANCE

