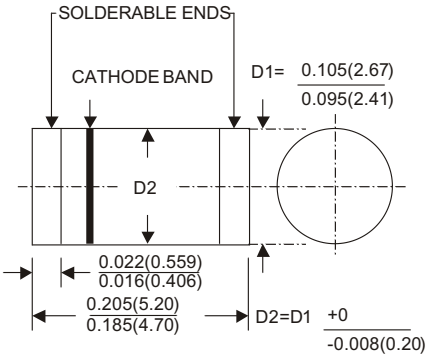
SM5817 thru SM5819

SURFACE MOUNT SCHOTTKY RECTIFIER

DO-213AB / MELF



Dimension in inches (millimeters)

FEATURES

- Low power loss, high efficiency
- High current and surge capability
- Low forward voltage drop
- For use in low voltage, highfrequency inverters, Free wheeling application
- Guarding for over voltage protechion
- Metal silicon junction, majority carrier conduction
- High temperature soldering guaranteed：
- 250°C/10 seconds/ • 375″ , (9.5mm) lead lengths

MECHANICAL DATA

Case：Molded plastic use UL94V-0 recoqnized flame retardant epoxy
Terminals：Plated terminals, solderable per MIL-STD-202, Method208
Polarity：Blue Color band on body denotes cathode
Mounting position：Any
Weight：0.12grams

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SM5817	SM5818	SM5819	UNITS
Maximum Current Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	24	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current T_T=90°C	$I_{(AV)}$	1.0			Amps
Peak Forward Surge Current Single Sine-Wave on Rated Load (JEDEC Method)	I_{FSM}	25			Amps
Maximum Instantaneous Forward Voltage Drop at 1.0A DC	V_F	0.45	0.55	0.6	Volts
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=125°C	I_R	1.0 10			mA
Typical Thermal Resistance	$R_{\theta JA}$	15			°C / W
Typical Junction Capacitance	C_J	110		80	pF
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150			°C

NOTES：
1. Thermal Resistance Junction Ambient
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D. C.

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RATINGS AND CHARACTERISTIC CURVES SM5817 THRU SM5819

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

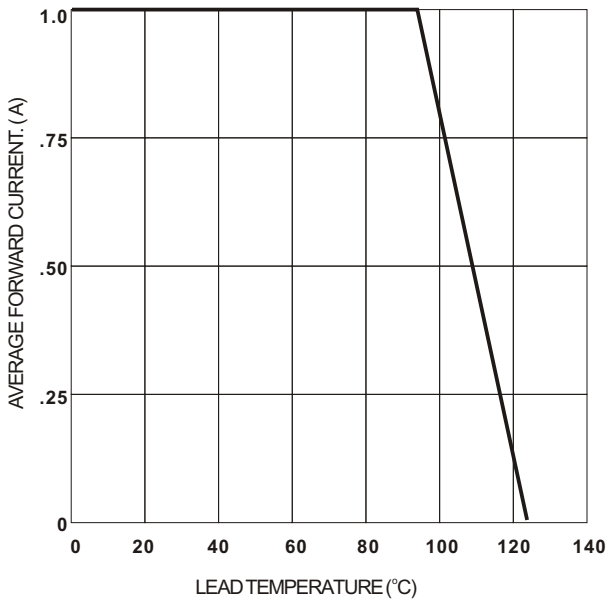

FIG. 2 - TYPICAL JUNCTION CAPACITANCE

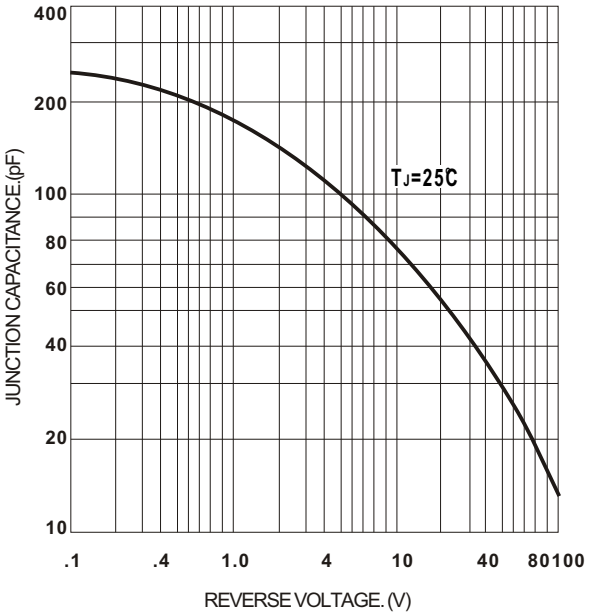

FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

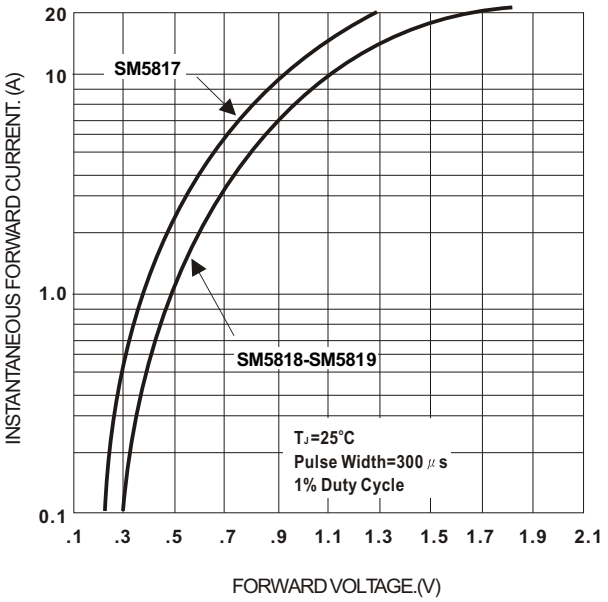

FIG. 4 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT