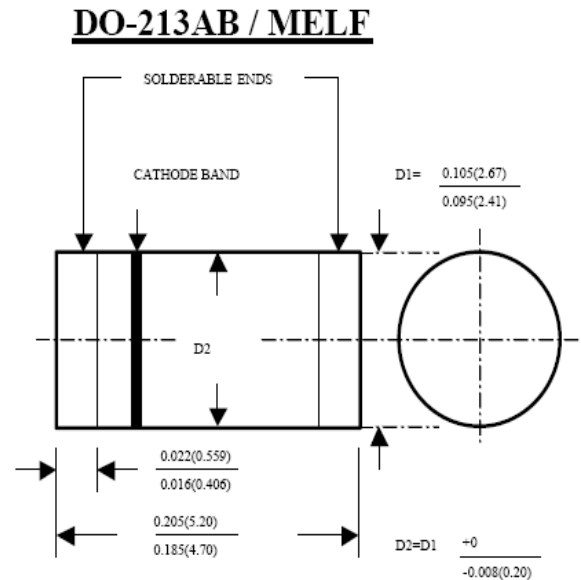


Features

- . Low power loss, high efficient
- . High surge current capability.
- . Low forward voltage drop
- . Guarding for overvoltage protection
- . High temperature soldering guaranteed:
250°C/10 seconds/.375", (9.5mm) lead lengths

Mechanical Data

- .Case: Molded plastic use UL94V-0 recognized flame retardant epoxy
- .Terminals: Plated terminals
- .Polarity: Color band on body denotes cathode
- .Mounting position: Any
- .Weight: 0.1296 gram



Maximum Ratings and Electrical Characteristics

Rating at 25°C Ambient temp. Unless otherwise specified.

Single phase, half sine wave, 60HZ, resistive or inductive load.

For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOL	SM5817	SM5818	SM5819	UNITS
Maximum Current 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	I(AV)	1.0			Amps
Peak Forward Surge Current Single Sine-wave on Rated Load (JEDEC Method)	IFSM	25			Amps
Maximum Instantaneous Forward Voltage Drop at 1.0A DC	VF	0.45	0.55	0.6	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25\text{ }^\circ\text{C}$ $T_A=100\text{ }^\circ\text{C}$	IR	0.5 10			mA
Typical Thermal Resistance	R θ JA	80			°C/W
VR= 4.0V, f = 1MHZ Typical Junction Capacitance	CJ	110			pF
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +125			°C

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

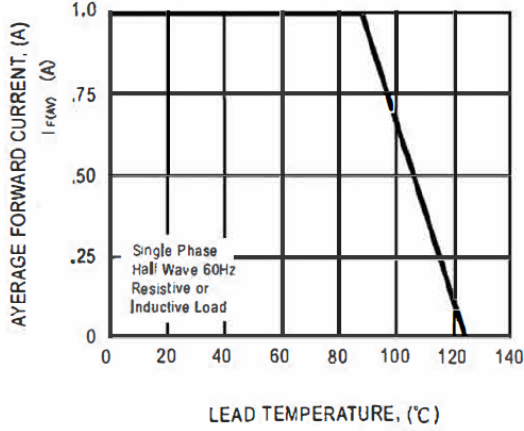


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

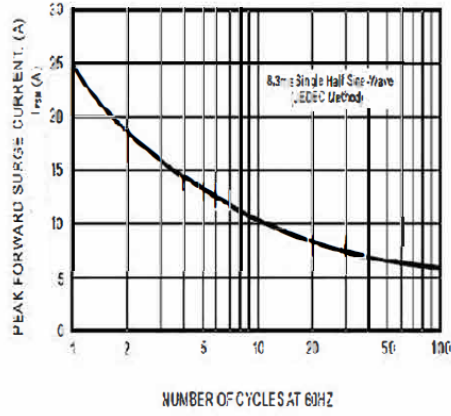


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

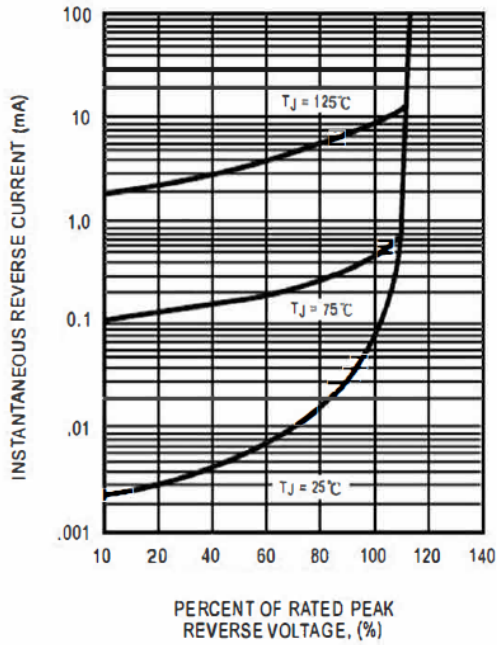


FIG. 4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

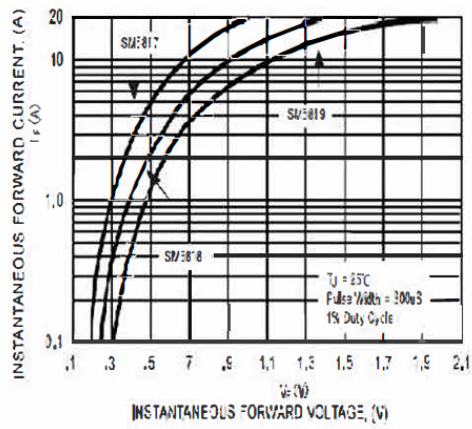
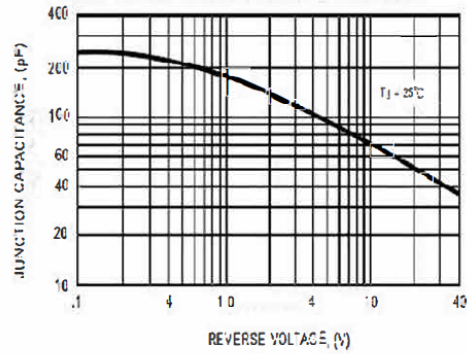


FIG. 5 – TYPICAL JUNCTION CAPACITANCE



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