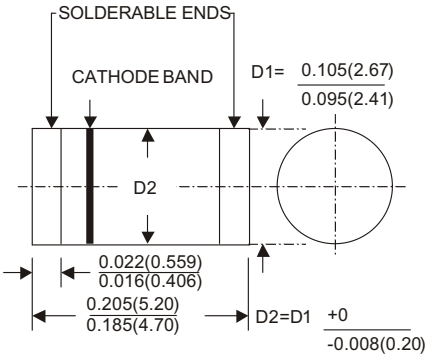
SM5817LV thru SM5819LV

SURFACE MOUNT LOW VF SCHOTTKY RECTIFIER

DO-213AB / MELF



Dimension in inches (millimeters)

FEATURES

- Low power loss, high efficiency
- High current and surge capability
- Low forward voltage drop
- Guardind for over voltage protechion
- 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
Polarity：Color band on body denotes cathode
Mounting position：Any
Weight：0.1296grams

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	SM5817LV	SM5818LV	SM5819LV	UNITS
Maximum Current 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	$I_{(AV)}$	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	0.35	0.38	0.4	Volts
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=100°C	I_R	0.5 10			mA
Typical Thermal Resistance	$R_{\theta JA}$	80			°C / W
Typical Junction Capacitance	C_J	110			pF
Operating Junction and Storage Temperature Range	T_J T_{STG}	-55 to +125			°C

SURFACE MOUNT LOW VF SCHOTTKY RECTIFIER

RATINGS AND CHARACTERISTIC CURVES SM5817LV THRU SM5819LV

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

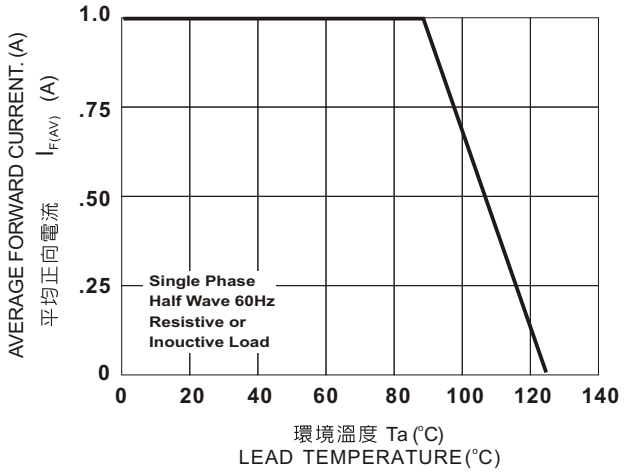


FIG. 2 - MAXIMUM NON - REPETITIVE PEAK FORWARD SURGE CURRENT

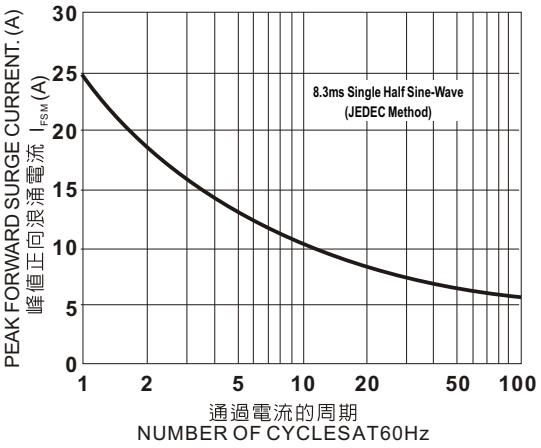


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

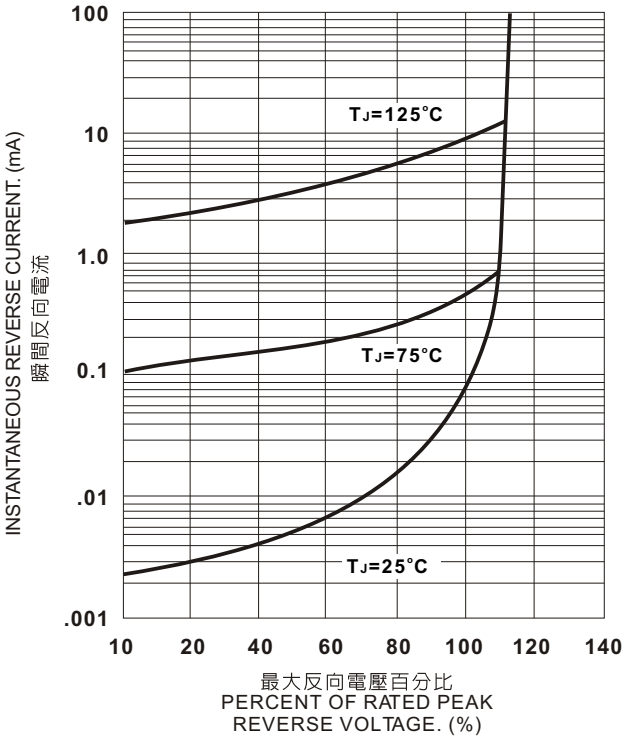


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

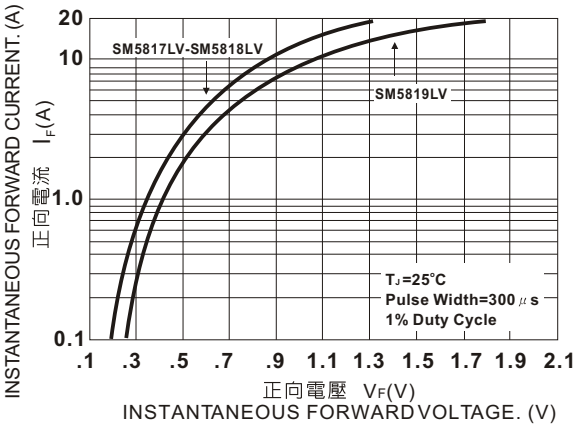


FIG. 5 - TYPICAL JUNCTION CAPACITANCE