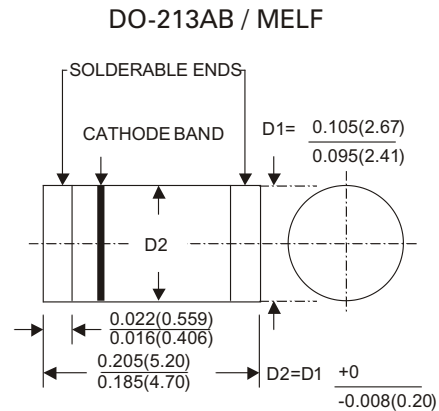


# SM5817LV thru SM5819LV

## SURFACE MOUNT LOW VF SCHOTTKY RECTIFIER



Dimension in inches (millimeters)

### FEATURES

- Low power loss, high efficiency
- High current and surge capability
- Low forward voltage drop
- Guardring for over voltage 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 : 0.1296grams

### MAXIMUM RATINGS 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 $T_A=25^{\circ}C$ at Rated DC Blocking Voltage $T_A=100^{\circ}C$	$I_R$	0.5 10			mA
Typical Thermal Resistance	$R_{\theta JA}$	80			$^{\circ}C / W$
Typical Junction Capacitance	$C_J$	110			pF
Operating Junction and Storage Temperature Range	$T_J$ $T_{STG}$	-55 to +125			$^{\circ}C$

# SM5817LV thru SM5819LV

## SURFACE MOUNT LOW VF SCHOTTKY RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES SM5817LV THRU SM5819LV

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

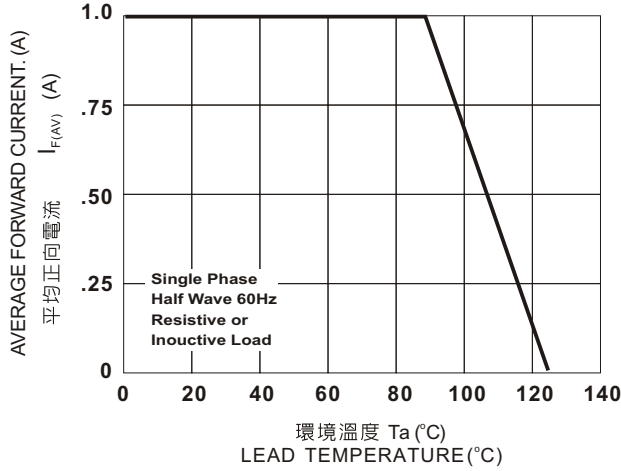


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

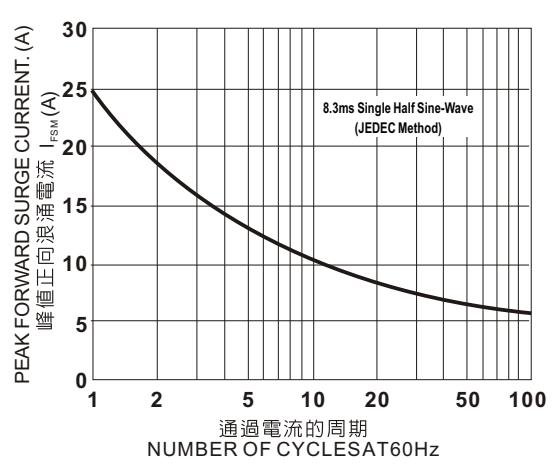


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

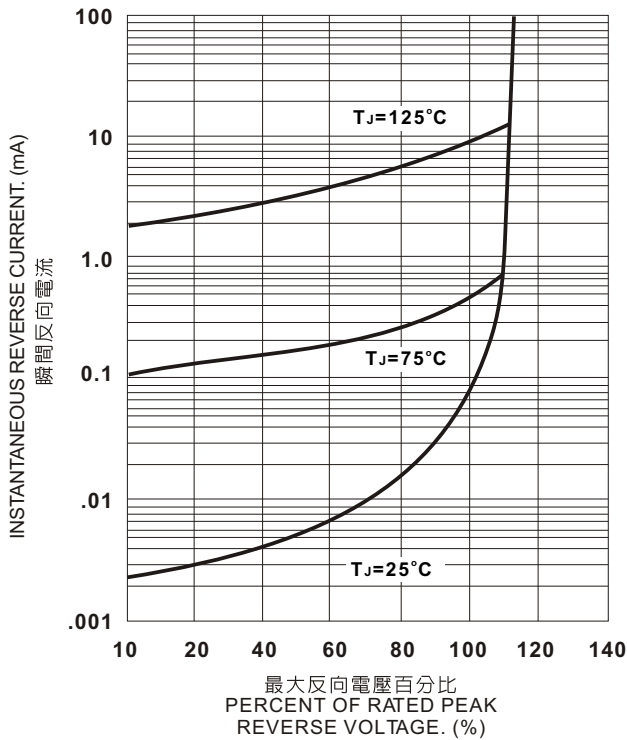


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

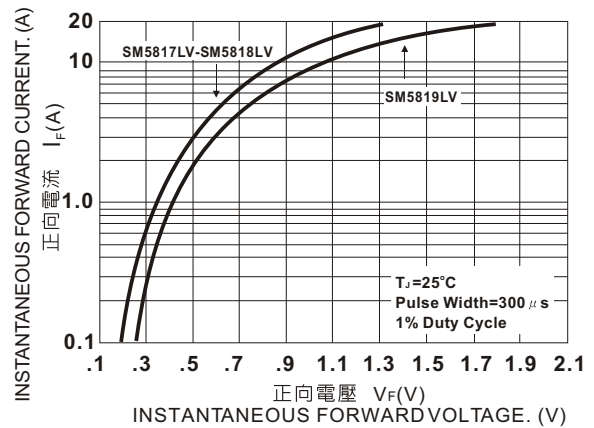


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

