



## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**SSL22 THRU SSL24**

**VOLTAGE RANGE**      **20 to 40Volts**

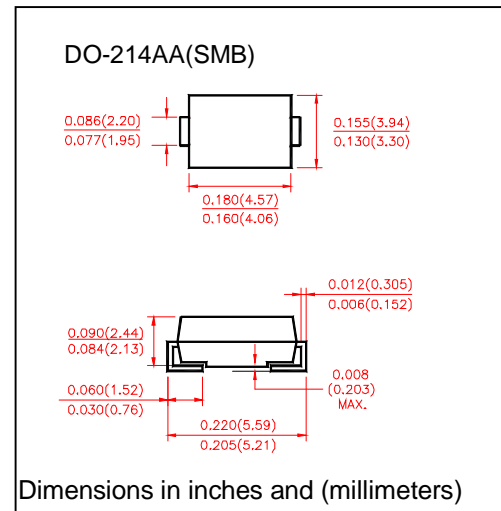
**CURRENT**              **2.0 Ampere**

### FEATURES

- Low profile surface mount package
- Built-in strain relief
- High switching speed, low  $V_F$
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, Free willing, and polarity protection applications
- Guarding for over voltage protection

### MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy :UL 94V-0 rate flame retardant
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.003 ounce, 0.093 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	MIN	NOMINAL	MAX	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS Voltage	$V_{RMS}$	20	30	40	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	Volts
Maximum Average Forward Rectified Current at $T_L$ See figur.1 $T_L=105^\circ C$	$I_{(AV)}$	2.0			Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50			Amps
Maximum Instantaneous Forward Voltage @ 2.0A(Note 1)	$V_F$	0.44			Volts
Maximum DC Reverse Current at rated DC Blocking voltage per element	$I_R$	$T_A=25^\circ C$	0.5		mA
		$T_A=100^\circ C$	10.0		
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	75			°C/W
	$R_{\theta JL}$	17			
Operating Junction Temperature	$T_J$	(-55 to+150)			°C
Storage Temperature Rang	$T_{STG}$	(-55 to +150)			°C

**Notes:**

1. Pulse test:300  $\mu$  s pulse width,1% duty cycle
2. PCB mounted with 0.2"×0.2"(5.0cm×5.0cm)copper pads



# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SM5817 THRU SM5819

VOLTAGE RANGE 20 to 40 Volts  
CURRENT 2.0 Ampere

## RATING AND CHARACTERISTIC CURVES SM5817 THRU SM5819

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

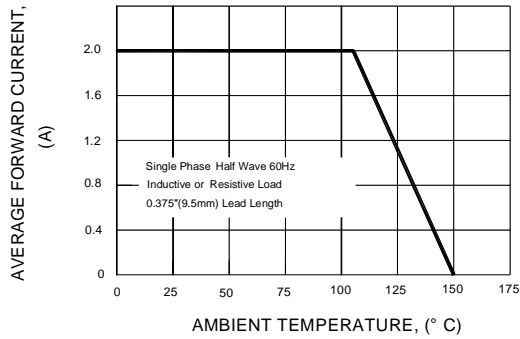


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

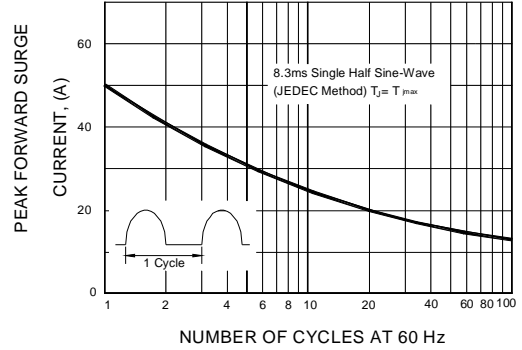


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

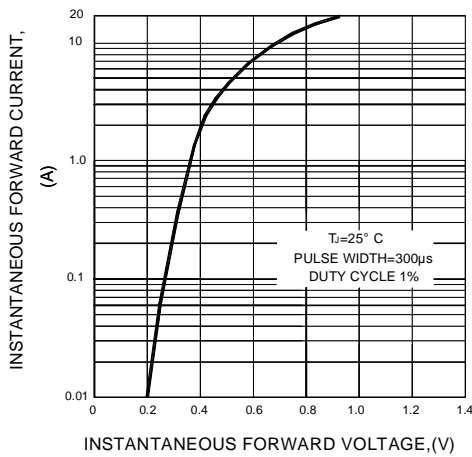


FIG.4-TYPICAL REVERSE CHARACTERISTICS

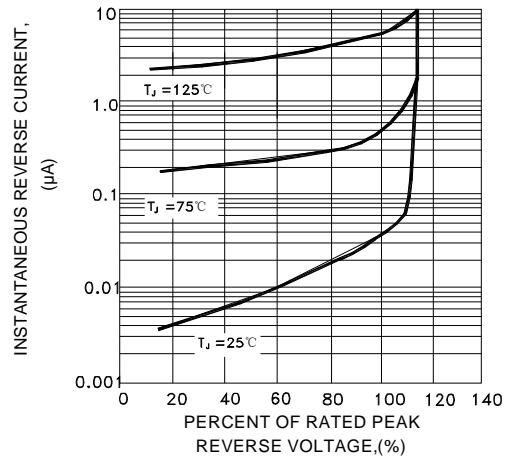


FIG.5-TYPICAL JUNCTION CAPACITANCE

