

SK12 THRU SK18

**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 80 Volts**

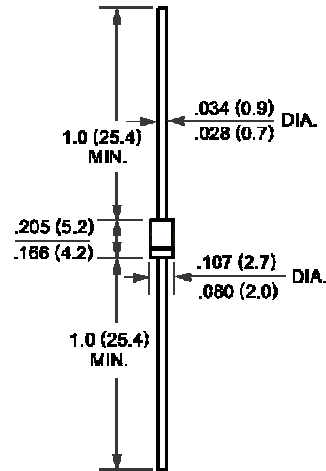
**CURRENT - 1.0 Ampere**

**FEATURES**

- \*Ideal for surface mounted application
- \*Low leakage current
- \*Glass passivated junction

**MECHANICAL DATA**

- \*Case: Molded Plastic
- \*Epoxy: UL 94V-0 rate flame retardant
- \*Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- \*Polarity: As marked
- \*Mounting position:Any
- \*Weight: 0.093 gram



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

	SYMBOL	1N5817	1N5818	1N5819	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS Voltage	$V_{RRS}$	14	21	28	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	Volts
Maximum Average Forward Rectified Current	$I_o$	10			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25			Amps
Maximum instantaneous Forward Voltage at 1.0A DC	$V_F$	.45	.55	.60	Volts
Maximum Forward Voltage at 3.1A DC	$V_F$	.75	.875	.90	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ C$	10			mAmps
	@ $T_A = 100^\circ C$	10			
Typical Thermal Resistance (Note1)	$R_{\theta JA}$	80			$^\circ C/w$
Typical Junction Capacitance (Note2)	$C_J$	110			pF
Storage and Operating Temperature Range	$T_J, T_{STG}$	-60 to +125			$^\circ C$

NOTES: 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting , 0.375"(9.5mm) Lead Length  
 2. Measured at 1MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES (1N5817 THRU 1N5819)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

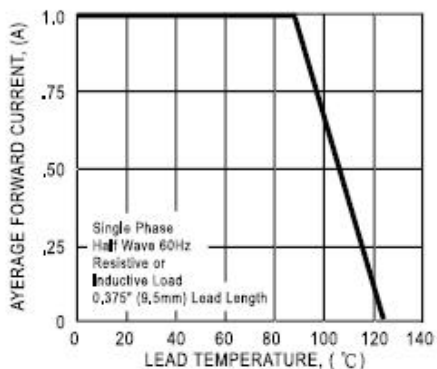


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

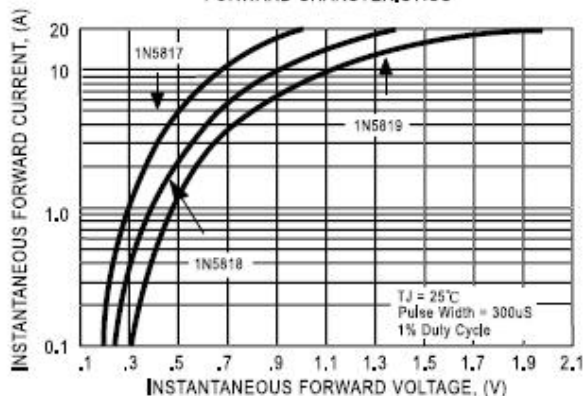


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

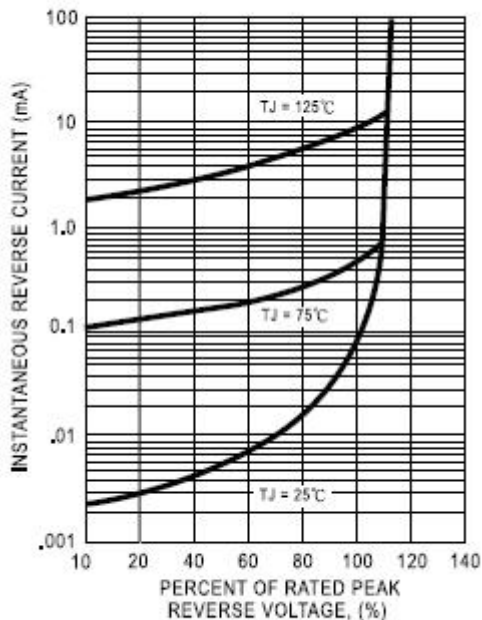


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

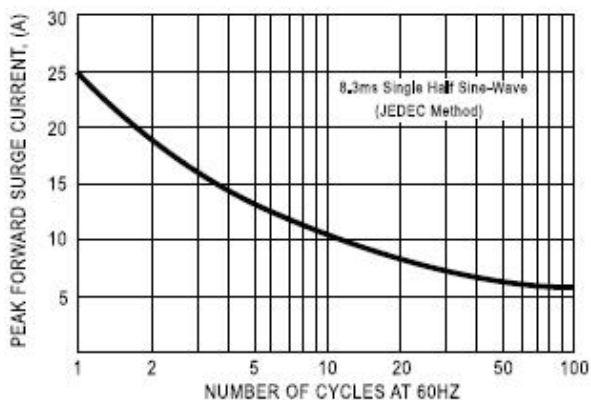


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

