HITANO ENTERPRISE CORP.

1N5817 THRU 1N5819

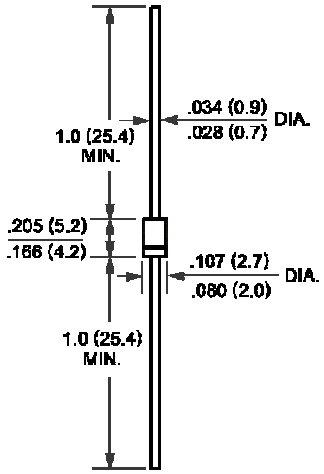
TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
VOLTAGE RANGE - 20 to 80 Volts **CURRENT - 1.0 Ampere**

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℃ 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		Io	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℃	I_R	10			mAmps
	@T_A =100℃		10			
Typical Thermal Resistance (Note1)		$R_{\Theta JA}$	80			℃/w
Typical Junction Capacitance (Note2)		C_J	110			pF
Storage and Operating Temperature Range		T_J ,T_{STG}	-60 to +125			℃

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

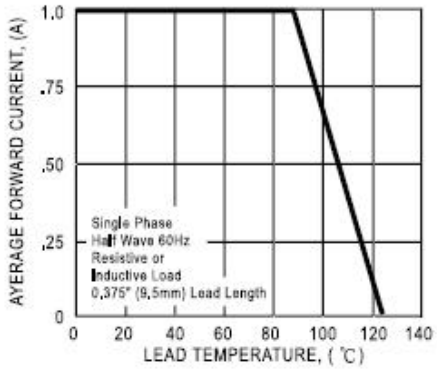


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

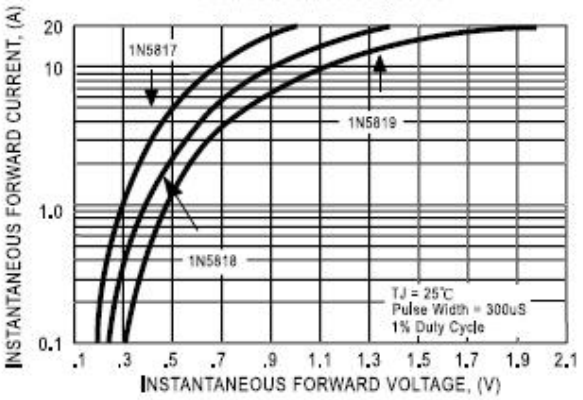


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

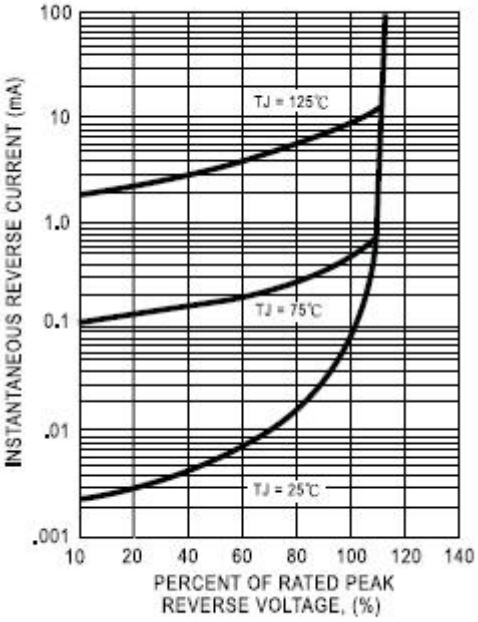


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

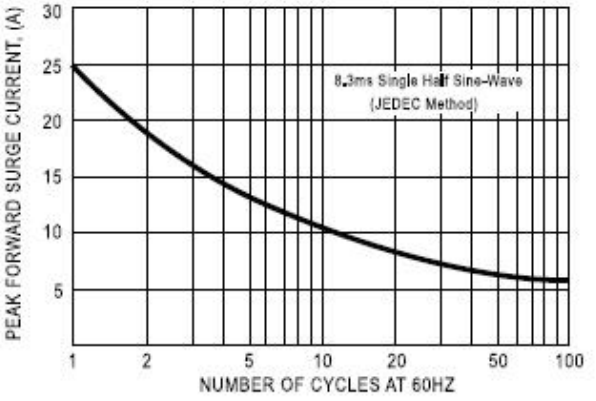


FIG. 5 - TYPICAL JUNCTION CAPACITANCE