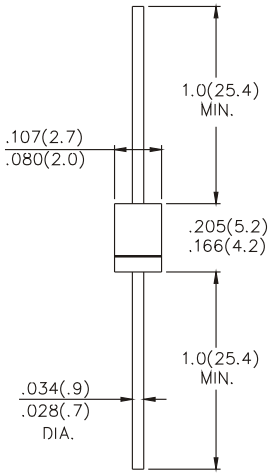
IN5817 thru IN5819

MINIATURE SCHOTTKY BARRIER RECTIFIER

CHENG-YI ELECTRONIC

VOLTAGE RANGE
20 TO 40 Volts
CURRENT
1.0 Amperes

DO-41



Dimensions in inches and (millimeters)

FEATURES

- Low switching noise
- Low forward voltage drop
- High current capability
- High switching capability
- High reliability
- High surge capability

MECHANICAL DATA

- Case:Molded plastic
- Epoxy:UL 94V-0 rate flame retardant
- Lead:MIL-STD-202 method 208 quaranteed
- Mounting position:Any

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%.

MAXIMUM RATINGS (At T_A=25°C unless otherwise noted)

Ratings	Symbol	IN5817	IN5818	IN5819	UNITS
Maximum Recurrent 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 .375" (9.5mm) lead length at T_L=90°C	I_O	1.0			Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)T_L=70°C	I_{FSM}	25			Amps
Typical Thermal Resistance (Note 1)	$R\theta_{JC}$	80			°C / W
Typical Junction Capacitance (Note 2)	C_J	110			pF
Storage and Operating Temperature Range	T_{STG}	-65 to +125			°C

ELECTRICAL CHARACTERISTICS (At T_A=25°C unless otherwise noted)

Characteristics		Symbol	IN5817	IN5818	IN5819	UNITS
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 Average Reverse Current at Rated DC Blocking Voltage	@T_A=25°C	I_R	1.0			mAmps
	@T_C=100°C		1.0			mAmps

Notes : 1. Thermal Resistance (Junction to Ambient) : Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

IN5817 thru IN5819

MINIATURE SCHOTTKY BARRIER RECTIFIER

CHENG-YI ELECTRONIC

RATING AND CHARACTERISTICS CURVES
IN5817 THRU IN5819

Fig.1 - FORWARD CURRENT DERATING CURVE

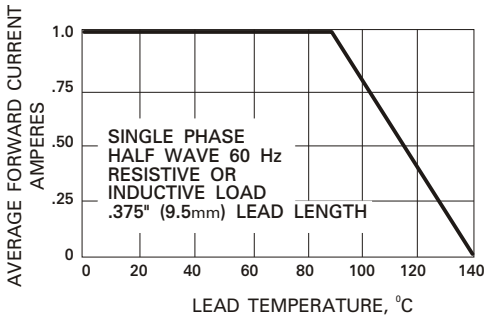


Fig.2 - TYPICAL FORWARD CHARACTERISTICS

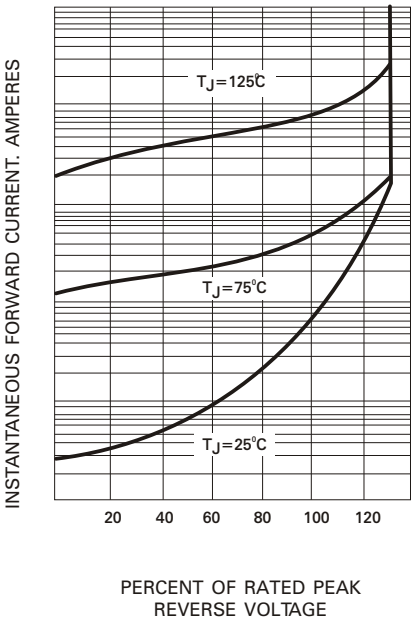


Fig.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

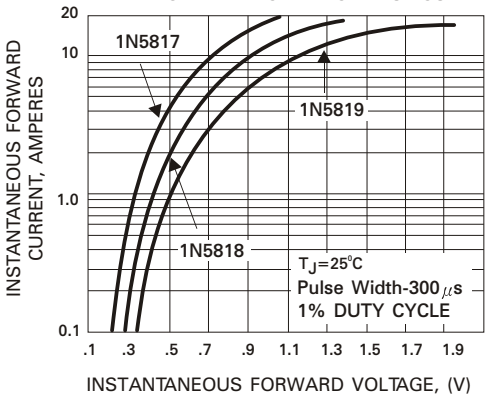


Fig.4 - MAXIMUM NON-REPETITIVE SURGE CURRENT

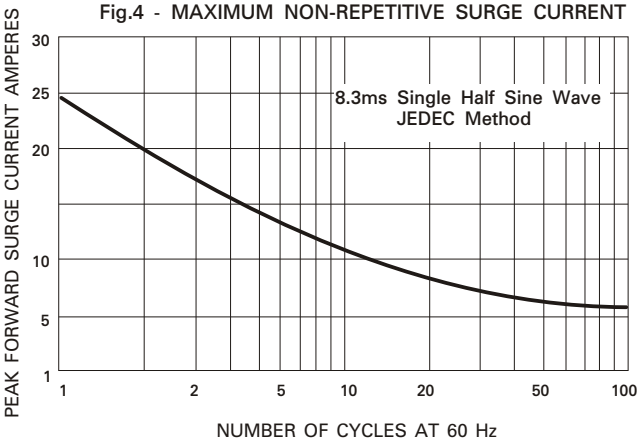


Fig.5 - TYPICAL JUNCTION CAPACITANCE