CHENMKO ENTERPRISE CO.,LTD

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 40 Volts CURRENT 1.0 Ampere

1N5817PT THRU 1N5819PT

Lead free devices

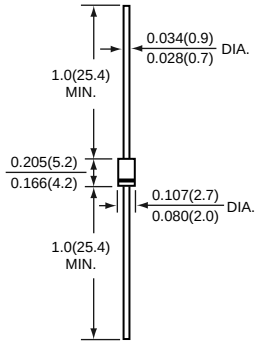
FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* Low switching noise
* Low forward voltage drop
* High current capability
* High switching capability
* High reliability
* High surge capability
* High temperature soldering guaranteed : 260°C/10 seconds , 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

DO-41

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.33 gram



Dimensions in inches and (millimeters)

DO-41

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%.

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

RATINGS	SYMBOL	1N5817PT	1N5818PT	1N5819PT	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 0.375" (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)	I_{FSM}	25			Amps
Typical Junction Capacitance (Note 1)	C_J	110			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	80			°C / W
Storage and Operating Temperature Range	T_J, T_{STG}	-65 to +125			°C

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

CHARACTERISTICS		SYMBOL	1N5817PT	1N5818PT	1N5819PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC		V_F	0.45	0.55	0.60	Volts
Maximum Instantaneous Forward Voltage at 3.0 A DC		V_F	0.75	0.875	0.90	Volts
Maximum Average Reverse Current	@ T_A = 25°C	I_R	1.0			mAmps
at Rated DC Blocking Voltage	@ T_A = 100°C		10			mAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance (Junction to Ambient) : Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

2001-6

RATING CHARACTERISTIC CURVES (1N5817PT THRU 1N5819PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

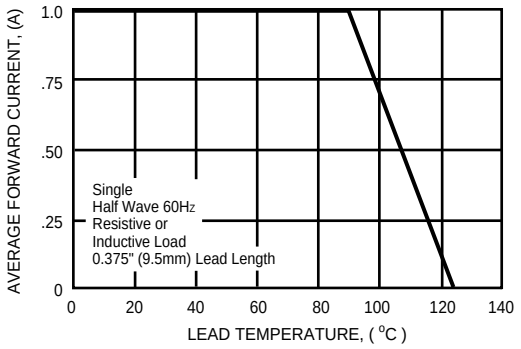


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

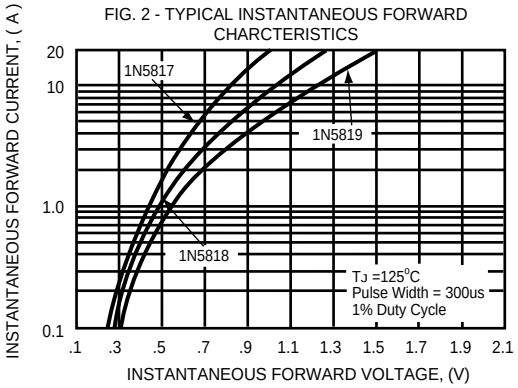


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

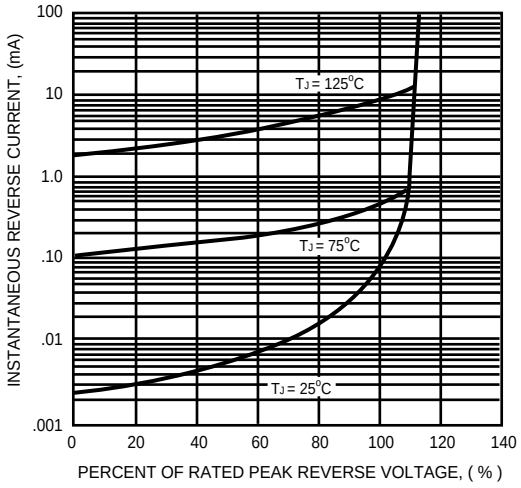


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

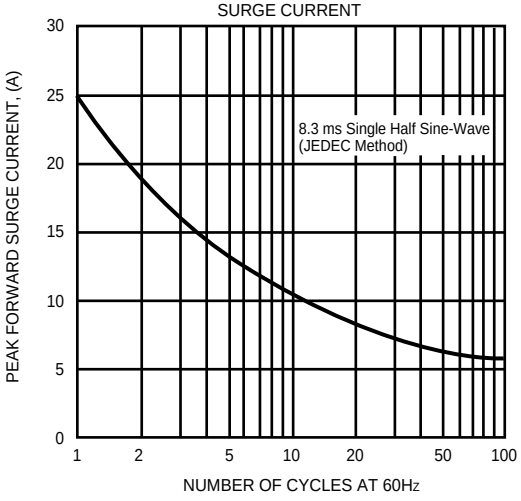


FIG. 5 - TYPICAL JUNCTION CAPACITANCE