



CHENMKO ENTERPRISE CO.,LTD

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 50 - 600 Volts CURRENT 1.0 Ampere

**MUR105PT
THRU
MUR160PT**

Lead free devices

FEATURES

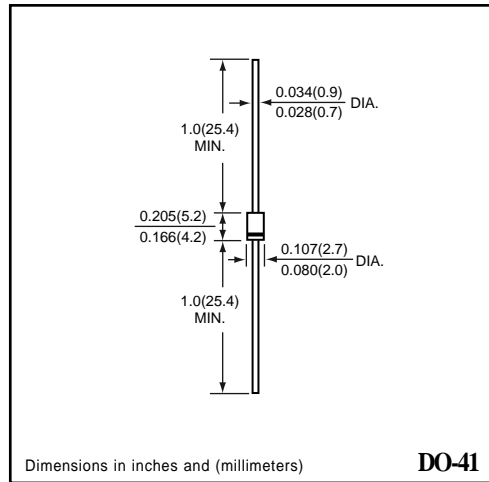
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * Low leakage
- * High current capability
- * High speed switching
- * High current surge
- * High reliability
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Indicated by cathode band
Weight: 0.35 gram



DO-41



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 RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MUR105PT	MUR110PT	MUR115PT	MUR12PT0	MUR130PT	MUR140PT	MUR150PT	MUR160PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	500	600	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	350	420	Volts
Maximum DC Blocking Voltage	Vdc	50	100	150	200	300	400	500	600	Volts
Maximum Average Forward Rectified Current	Io	1.0@TA=130°C			1.0@TA=120°C				Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM					35				Amps
Typical thermal resistance	R θJA					52				°C / W
Operating and Storage Temperature Range	TJ, TSTG					-65 to +175				°C

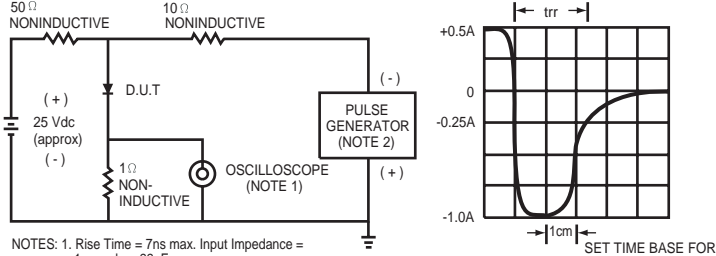
ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MUR105PT	MUR110PT	MUR115PT	MUR12PT0	MUR130PT	MUR140PT	MUR150PT	MUR160PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	VF	0.90			1.25				Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage at TJ = 25°C	IR	2.0			5.0				uAmps	
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TJ = 150°C		50			150				uAmps	
Maximum Reverse Recovery Time (Note 1)	trr	25			50				nSec	

NOTES : 1. Test Conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A

RATING CHARACTERISTIC CURVES (MUR105PT THRU MUR160PT)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF.
2. Rise Time = 10ns max. Source Impedance = 50 ohms.

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

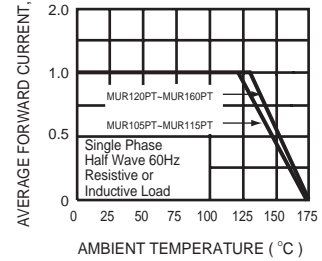


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

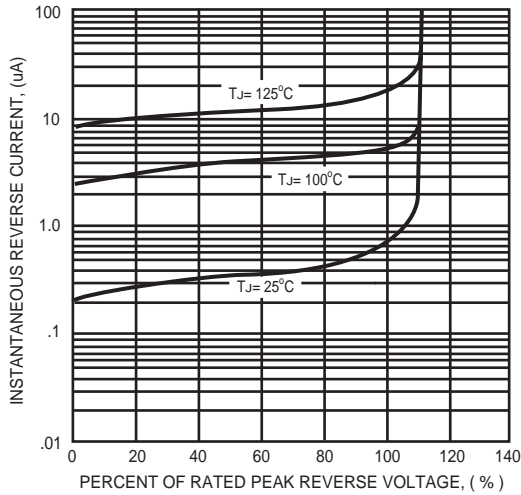


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

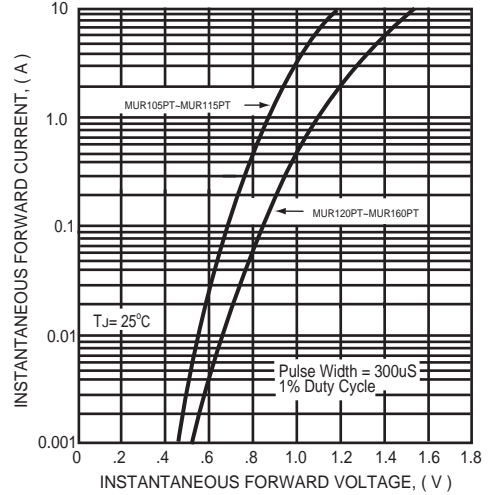


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

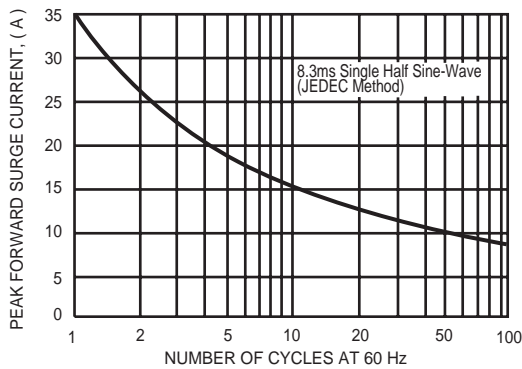


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

