



CHENMKO ENTERPRISE CO.,LTD

**MUR170PT
THRU
MUR1100PT**

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 700 - 1000 Volts CURRENT 1.0 Ampere

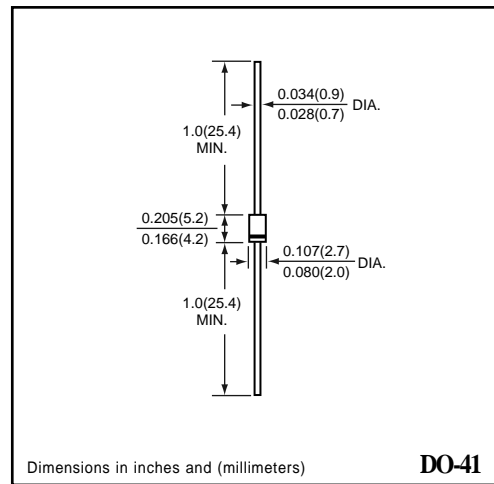
Lead free devices

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



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	MUR170PT	MUR180PT	MUR190PT	MUR1100PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	700	800	900	1000	Volts
Maximum RMS Voltage	VRMS	490	560	630	700	Volts
Maximum DC Blocking Voltage	VDC	700	800	900	1000	Volts
Maximum Average Forward Rectified Current	Io	1.0@TA=90°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)

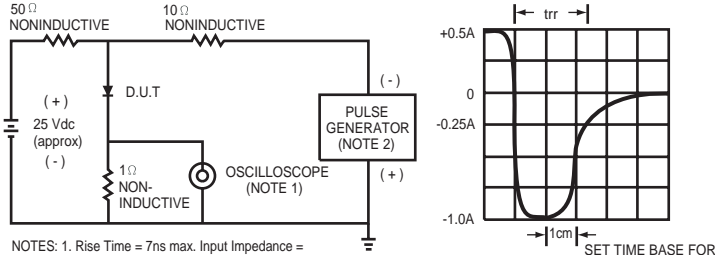
CHARACTERISTICS	SYMBOL	MUR170PT	MUR180PT	MUR190PT	MUR1100PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	VF	1.75				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage at TJ = 25°C	IR	10				uAmps
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TJ = 150°C		600				uAmps
Maximum Reverse Recovery Time (Note)	trr	75				nSec

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

2001-6

RATING CHARACTERISTIC CURVES (MUR170PT THRU MUR1100PT)

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

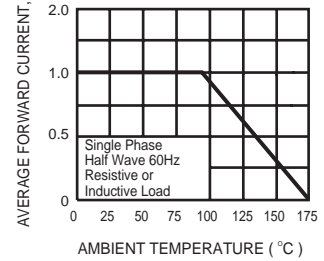


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

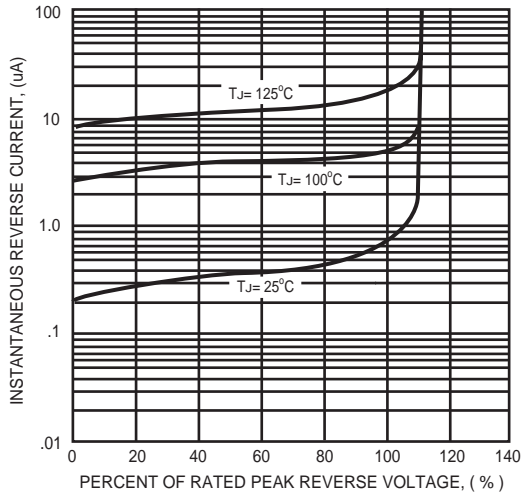


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

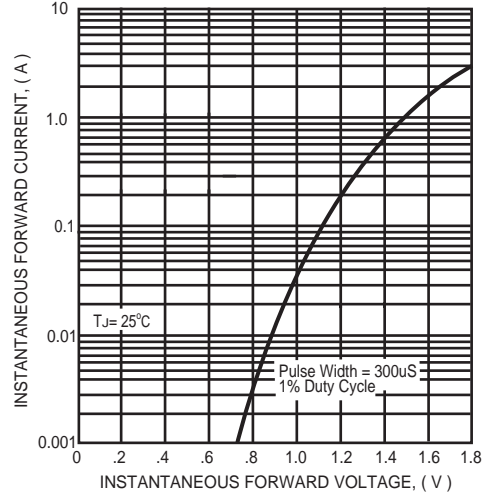


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

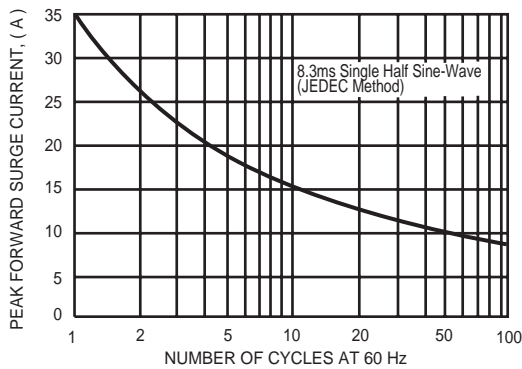


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

