

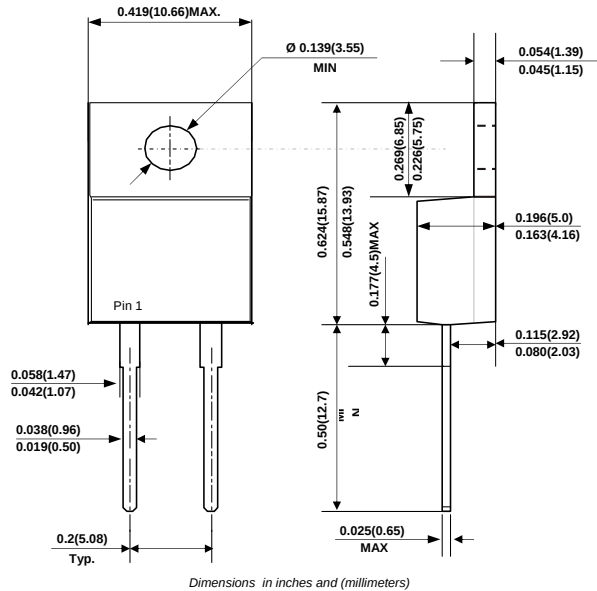


MUR1005T THRU MUR1060T

SUPER FAST RECOVERY RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 10.0 Ampere

TO-220AC



FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- ◆ Exceeds environmental of MIL-S-19500/228
- ◆ Low power loss, high efficiency.
- ◆ Low forward voltage, high current capability.
- ◆ High surge capability.
- ◆ Super fast recovery times, high voltage.
- ◆ Epitaxial chip construction.
- ◆ In compliance with EU RoHS 2002/95/EC directives.

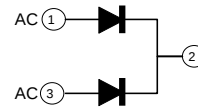
MECHANICAL DATA

Case: TO-220AC, Molded plastic.

Terminals: Solderable per MIL-STD-750 - Method 2026

Weight: 1.859 gram (0.0655 ounces).

Standard Packaging : Tube.



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 current derate by 20%.

PARAMETER	SYMBOLS	MUR1005T	MUR1010T	MUR1020T	MUR1040T	MUR1060T	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	Volts
Maximum DC Breakdown Voltage	VDC	50	100	200	400	600	Volts
Maximum Average Forward Current at T _C =100°C	IF(AV)	10.0					Amp
Peak Forward Surge Current, 8.3ms single half sinewave superimposed on rated olad(JEDEC method)	IFSM	125					Amps
Maximum Forward Voltage at 5A	VF	0.95			1.30	1.70	Volts
Maximum DC Reverse Current at TJ=25°C Rated DC Blocking Voltage TJ=100°C	IR	1.0 500					μA
Maximum Reverse Recovery Time (NOTE 2)	trr	35			50		pF
Typical Junction Capacitance (NOTE 1)	CJ	62					°C/W
Typical Thermal Resistance	RθJC	3.0					°C
Operating and Storage Temperature Range	TSTG	-55 ~ +150					°C

- Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.
3. Both Bonding and Chip structure are available.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

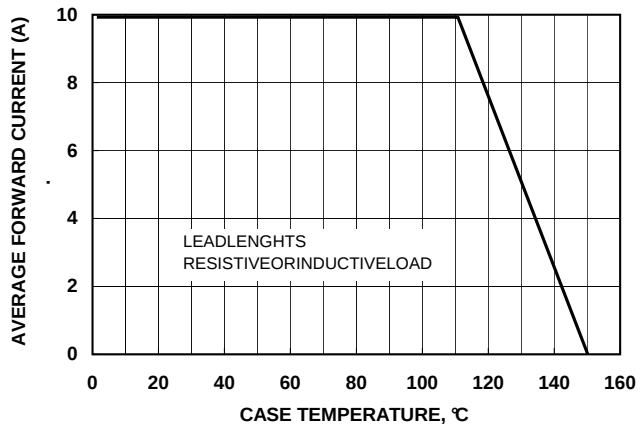


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

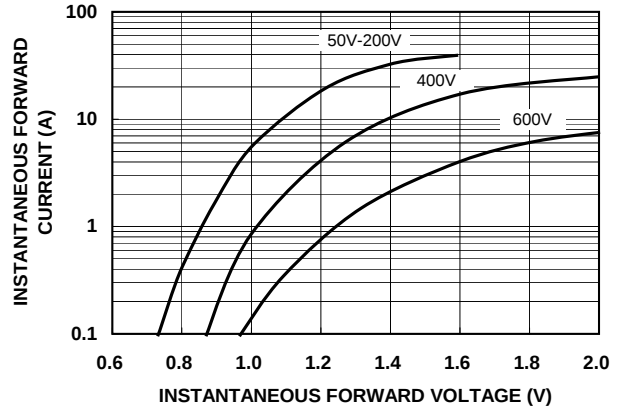


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

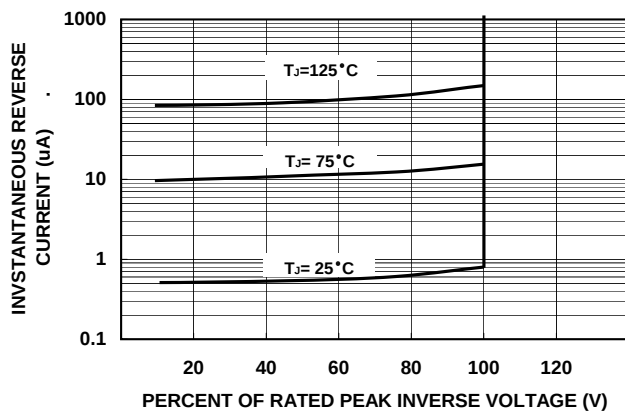


FIG. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

