

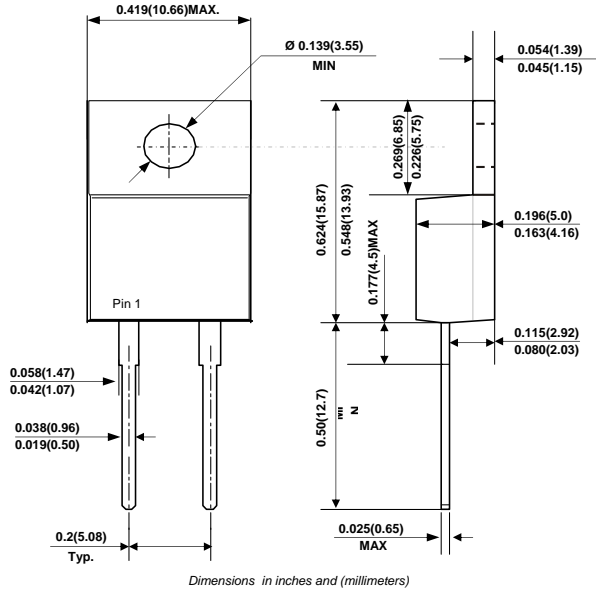


MUR1005T THRU MUR1060T

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.

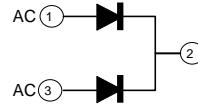
MECHANICAL DATA

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	V _{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	Volts
Maximum DC Breakdown Voltage	V _{DC}	50	100	200	400	600	Volts
Maximum Average Forward Current at T _C = 100°C	I _{F(AV)}	10.0					Amp
Peak Forward Surge Current, 8.3ms single half sinewave superimposed on rated load (JEDEC method)	I _{FSM}	125					Amps
Maximum Forward Voltage at 5A	V _F	0.95		1.30		1.70	Volts
Maximum DC Reverse Current at T _J = 25°C Rated DC Blocking Voltage T _J = 100°C	I _R	1.0 500					μA
Maximum Reverse Recovery Time (NOTE 2)	t _{rr}	35			50		pF
Typical Junction Capacitance (NOTE 1)	C _J	62					°C/W
Typical Thermal Resistance	R _{θJC}	3.0					°C
Operating and Storage Temperature Range	T _{STG}	-55 ~ +150					°C

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



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

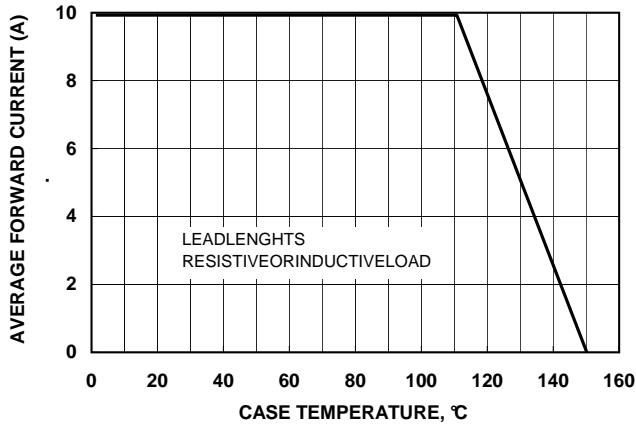


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

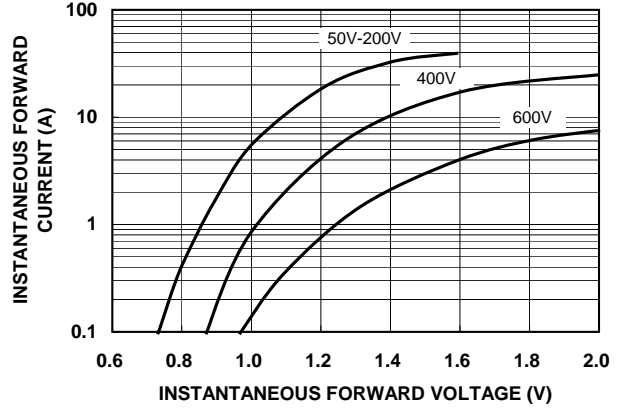


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

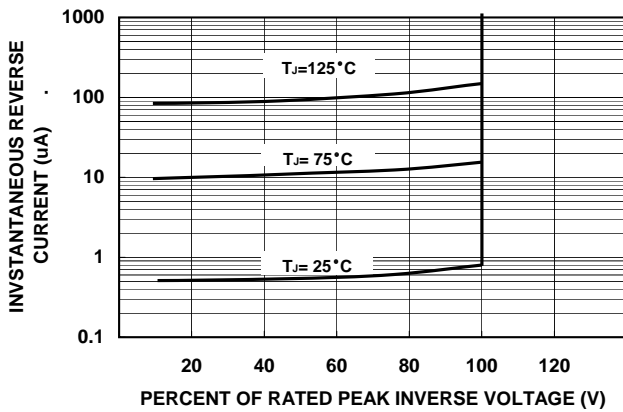


FIG. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

