



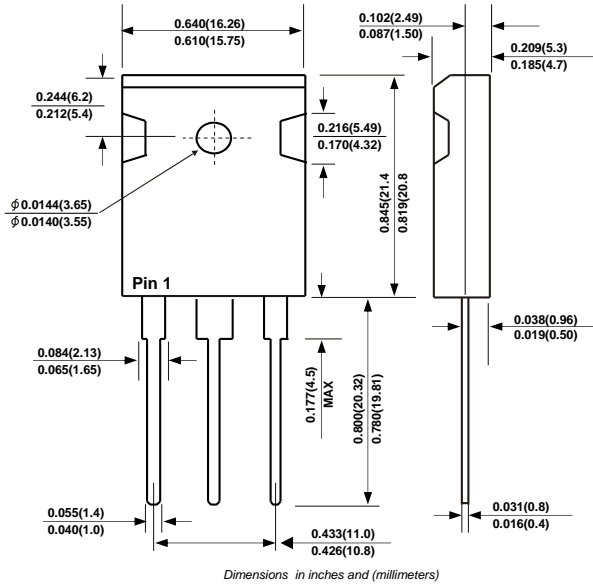
MUR3005PT THRU MUR3060PT

SUPER FAST RECOVERY RECTIFIER

Reverse Voltage - 50 and 600 Volts Forward Current - 30.0 Ampere

TO-247AD/TO-3P

FEATURES



- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- ◆ Low Leakage
- ◆ Ultra fast 35 Nanosecond Recovery Time
- ◆ Low Forward Voltage Drop
- ◆ Pb free product : 99% Sn above can meet RoHS
- ◆ environment substance directive request

MECHANICAL DATA

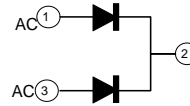
Case: TO-247AD/TO-3P, Molded plastic.

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

Standard Packaging : Tube.

Approx. Weight: 6 Gram

Mounting Torque: 0.8~1.2Nm maximum



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	MUR 3005PT	MUR 3010PT	MUR 3015PT	MUR 3020PT	MUR 3040PT	MUR 3060PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	105	140	280	420	Volts
Maximum DC Breakdown Voltage	V_{DC}	50	100	150	200	400	600	Volts
Maximum Average Forward Current at $T_C = 100^\circ\text{C}$	$I_F(AV)$	30.0						Amp
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	250						Amps
Maximum Forward Voltage at 10A at $I_F = 15.0A$ Pre diode	V_F	0.975				1.30	1.70	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$	I_R	10.0 500						μA
Maximum Reverse Recovery Time (NOTE 2)	t_{rr}	35				50		nS
Typical Junction Capacitance (NOTE 1)	C_J	140						pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_{STG}	-40 ~ +150						$^\circ\text{C}$

- Note:**
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Reverse Recovery Test Conditions: $I_F = 1A$, $di/dt = 100A/\mu s$, $V_R = 30V$, $T_J = 25^\circ\text{C}$
 3. Infinite heatsink.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

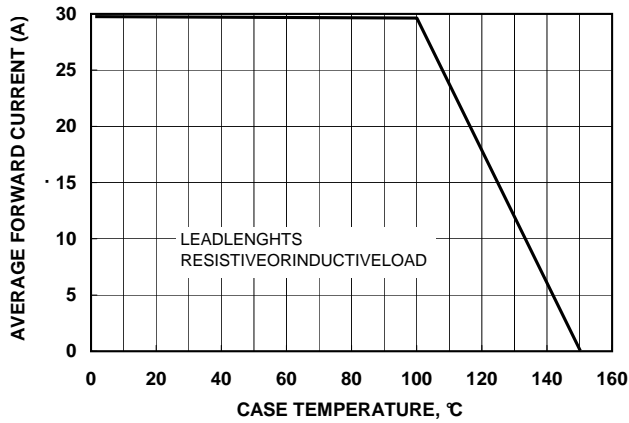


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

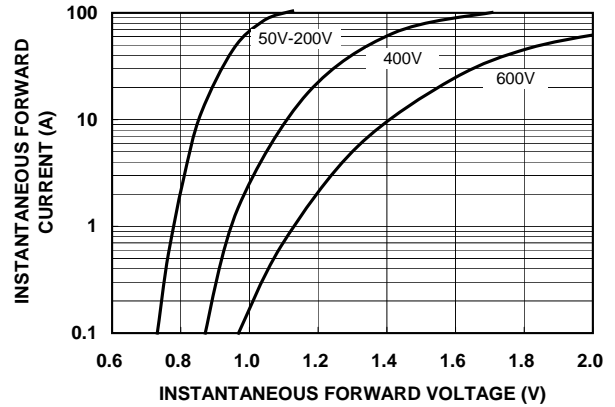


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

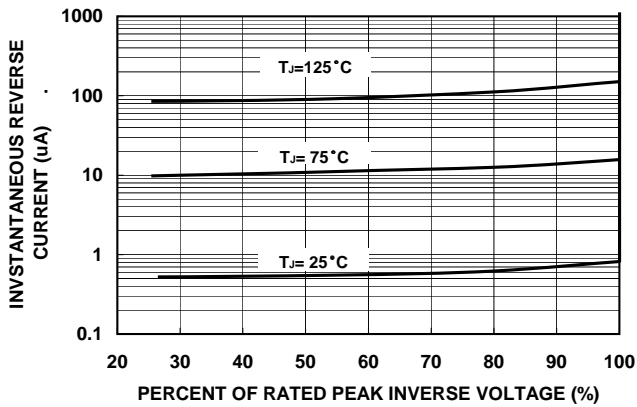


FIG. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

