

Pb Free Plating Product

MUR3005PT thru MUR3060PT



30 Ampere Glass Passivated Ultrafast Rectifiers

Features

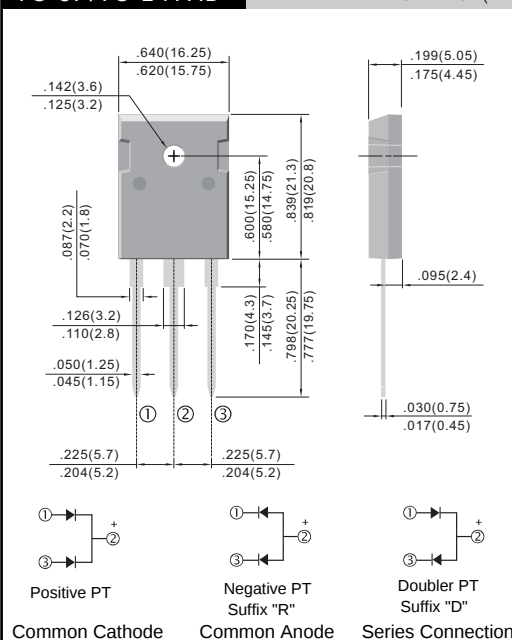
- ✧ Dual rectifier construction, positive center-tap
- ✧ Plastic package has Underwriters Laboratory Flammability Classification 94V0
- ✧ Glass passivated chip junctions
- ✧ Superfast recovery time, high voltage
- ✧ Low forward voltage, high current capability
- ✧ Low thermal resistance
- ✧ Low power loss, high efficiency
- ✧ High temperature soldering guaranteed: 260°C, 0.16"(4.06mm) from case for 10 seconds

Mechanical Data

- ✧ Cases: TO-3P/TO-247AD molded plastic
- ✧ Terminals: Pure tin plated, lead free solderable per MIL-STD-750. Method 2026
- ✧ Polarity: As marked
- ✧ Mounting position: Any
- ✧ Mounting torque: 10in-lbs. Max.
- ✧ Weight: 0.2 ounce, 5.6 grams

TO-3P/TO-247AD

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	MUR 3005PT	MUR 3010PT	MUR 3020PT	MUR 3030PT	MUR 3040PT	MUR 3060PT	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current T _C =125°C	I _{F(AV)}	30.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	300						A
Maximum Instantaneous Forward Voltage @ 15.0 A	V _F	0.95			1.3		1.5	V
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	10 500						uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35					60	nS
Typical junction Capacitance (Note 2)	C _J	150						pF
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150						°C

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.
 (2) Thermal Resistance junction to terminal.
 (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

FIG.1 - FORWARD CURRENT DERATING CURVE

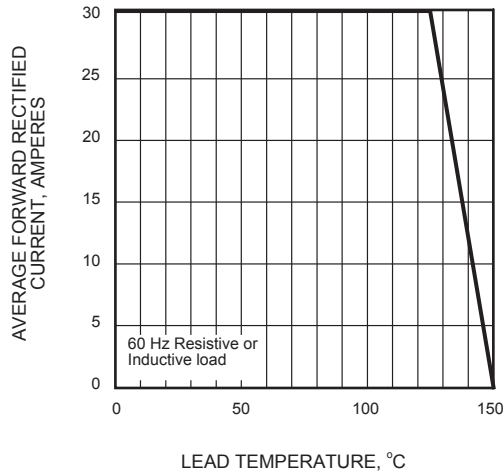


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

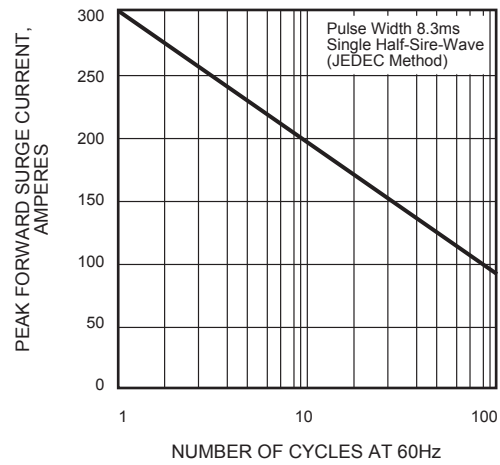


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

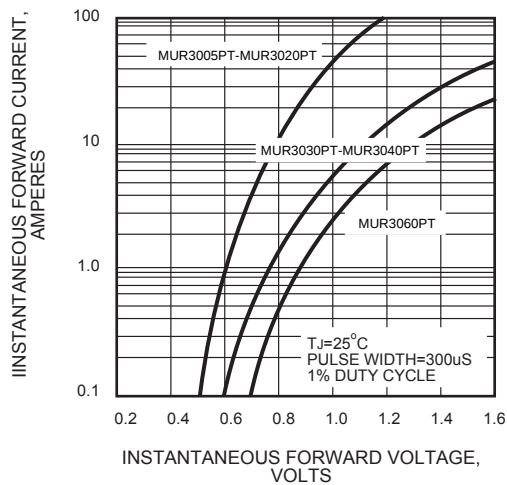


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

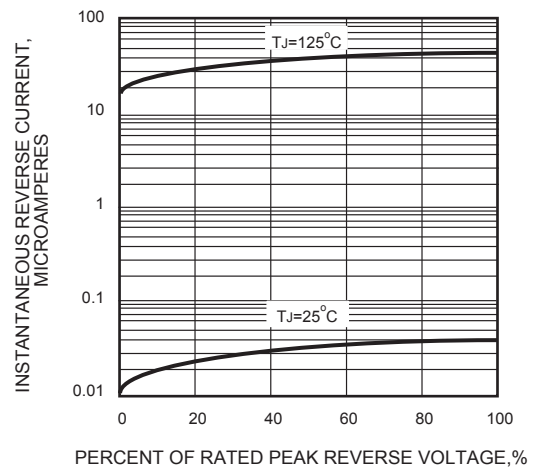


FIG.5 - TYPICAL JUNCTION CAPACITANCE

