

Pb Free Plating Product

MUR2005 thru MUR2060



20.0 Ampere Glass Passivated Junction Ultrafast Recovery Rectifiers

Features

- ★ Fast switching for high efficiency
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Application

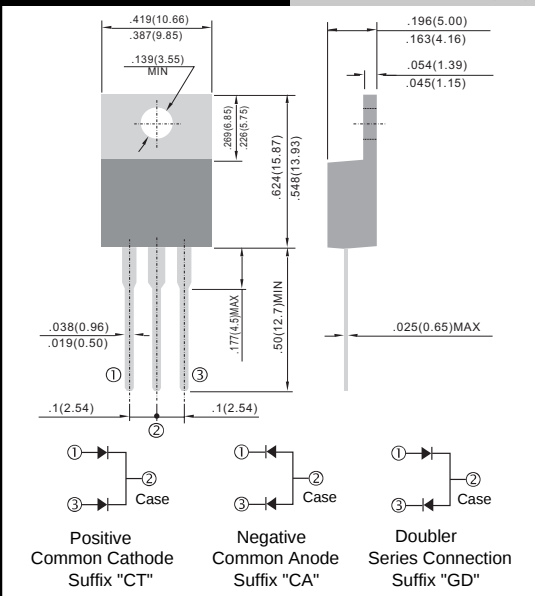
- ★ Automotive Environment|DC Motor Control
- ★ Plating Power Supply|UPS
- ★ Amplifier and Sound Device System etc..

Mechanical Data

- ★ Case: Molded plastic TO-220AB Heatsink
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208
- ★ Polarity: As marked on diode body
- ★ Mounting position: Any
- ★ Weight: 2.03 grams

TO-220AB

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%.

Common Cathode Suffix "CT" Common Anode Suffix "CA" Anode and Cathode Coexistence Suffix "GD"	SYMBOL	MUR2005CT MUR2005CA MUR2005GD	MUR2010CT MUR2010CA MUR2010GD	MUR2020CT MUR2020CA MUR2020GD	MUR2030CT MUR2030CA MUR2030GD	MUR2040CT MUR2040CA MUR2040GD	MUR2060CT MUR2060CA MUR2060GD	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)}	20.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200			175			A
Maximum Instantaneous Forward Voltage @ 10.0 A	V _F	0.975			1.3		1.5	V
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	10.0 250						uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35						nS
Typical junction Capacitance (Note 2)	C _J	120			70			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) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

FIG.1 - FORWARD CURRENT DERATING CURVE

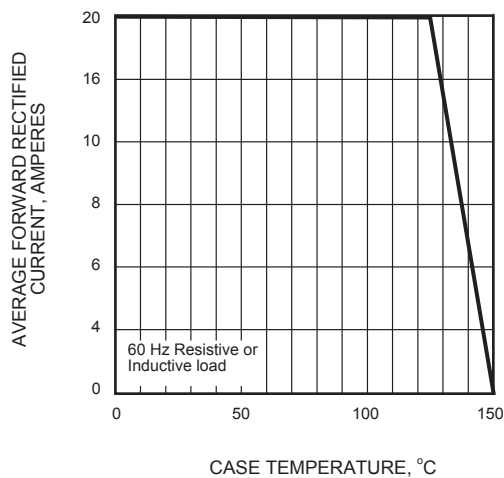


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

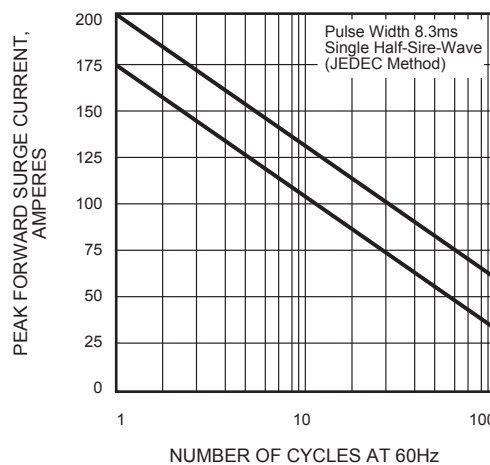


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

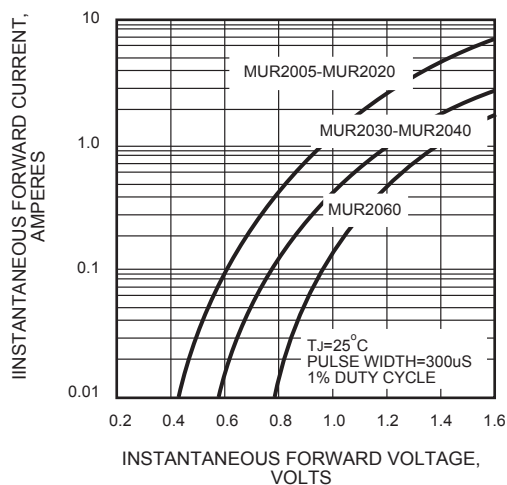


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

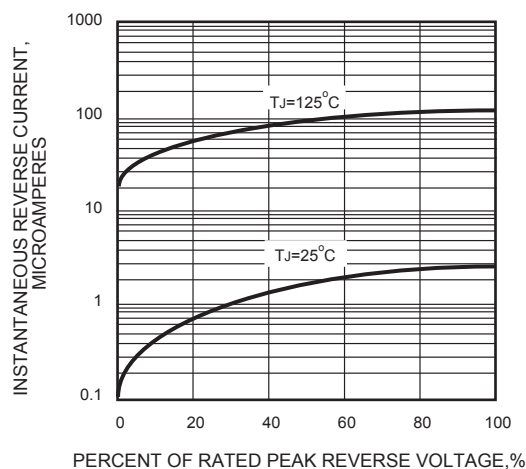


FIG.5 - TYPICAL JUNCTION CAPACITANCE

