

Pb Free Plating Product

MUR1605 thru MUR1660



16.0 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

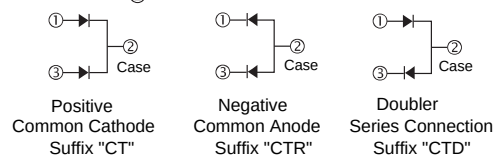
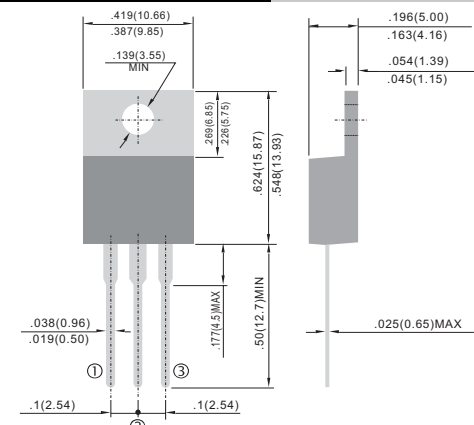
- ★ Automotive Environment|DC Motor Control
- ★ Plating Power Supply|UPS
- ★ Amplifier and Sound Device System etc..

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 "CTR" Anode and Cathode Coexistence Suffix "CTD"	SYMBOL	MUR1605CT MUR1605CTR MUR1605CTD	MUR1610CT MUR1610CTR MUR1610CTD	MUR1620CT MUR1620CTR MUR1620CTD	MUR1630CT MUR1630CTR MUR1630CTD	MUR1640CT MUR1640CTR MUR1640CTD	MUR1660CT MUR1660CTR MUR1660CTD	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 =100°C	I _{F(AV)}	16.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	175			150			A
Maximum Instantaneous Forward Voltage @ 8.0 A	V _F	0.98			1.3	1.7		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	90						pF
Typical Thermal Resistance (Note 3)	R _{θJC}	2.2						°CW
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150						°C

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, R = 1.0A, I_{rr} = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

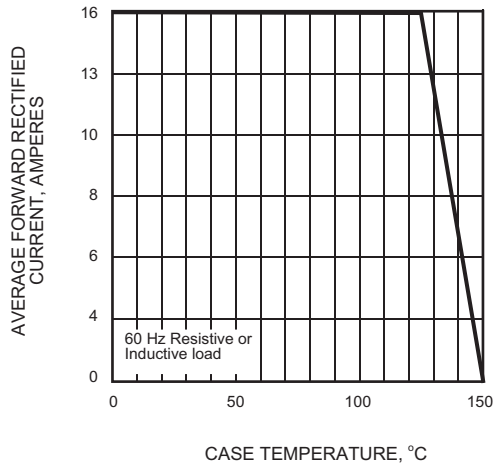


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

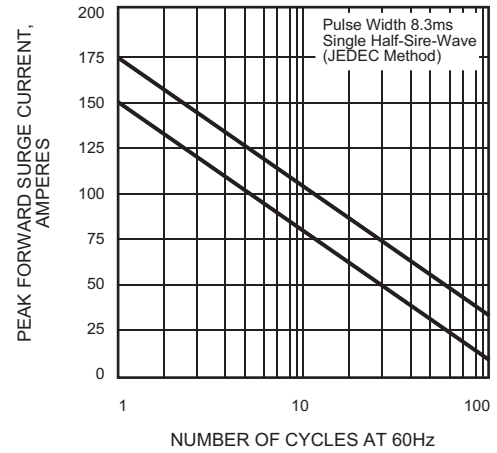


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

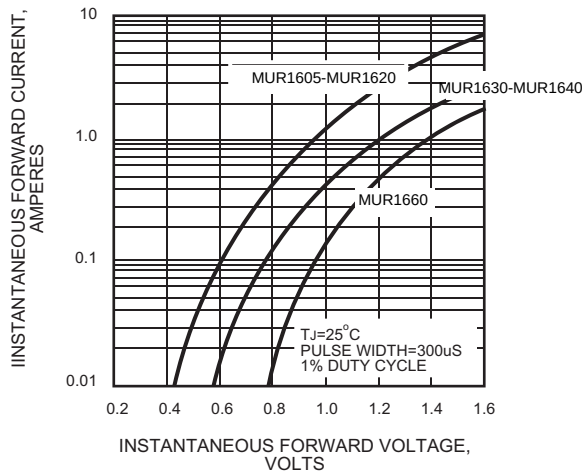


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

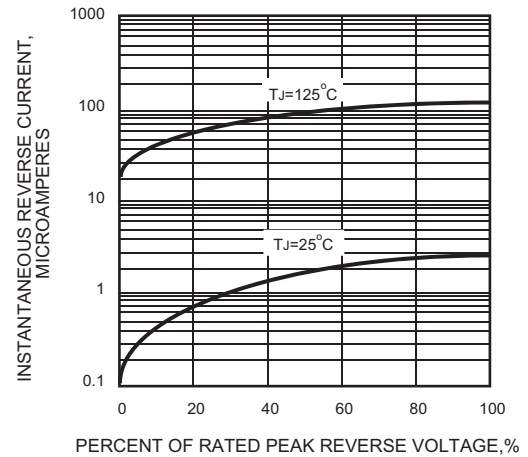


FIG.5 - TYPICAL JUNCTION CAPACITANCE

