

Pb Free Plating Product

MURF1605 thru MURF1660



16.0 Ampere Isolated Glass Passivated Ultrafast Recovery Rectifier Diode

Features

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

Application

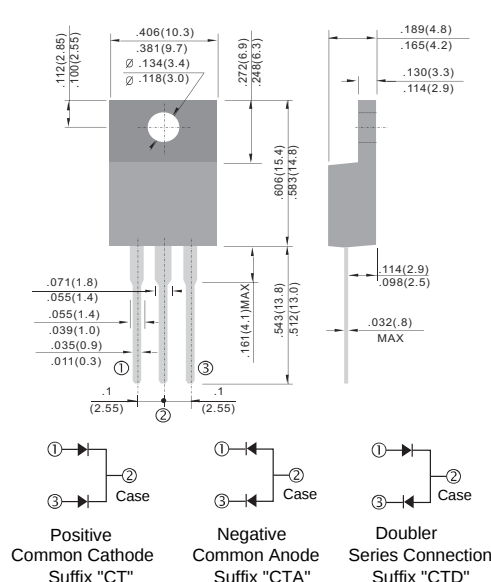
- ★ Automotive Environment|DC Motor Control
- ★ Plating Power Supply|UPS
- ★ Amplifier and Sound Device System etc..

Mechanical Data

- ★ Case: Molded plastic Isolated/Insulated ITO-220AB
- ★ 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

ITO-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 "CTA" Anode and Cathode Coexistence Suffix "CTD"	SYMBOL	MURF1605CT MURF1605CTA MURF1605CTD	MURF1610CT MURF1610CTA MURF1610CTD	MURF1620CT MURF1620CTA MURF1620CTD	MURF1630CT MURF1630CTA MURF1630CTD	MURF1640CT MURF1640CTA MURF1640CTD	MURF1660CT MURF1660CTA MURF1660CTD	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	Vbc	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	16.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	175			150			A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.98			1.3		1.7	V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10.0 250						uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	35						nS
Typical junction Capacitance (Note 2)	CJ	90						pF
Typical Thermal Resistance (Note 3)	RθJC	2.2						°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-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

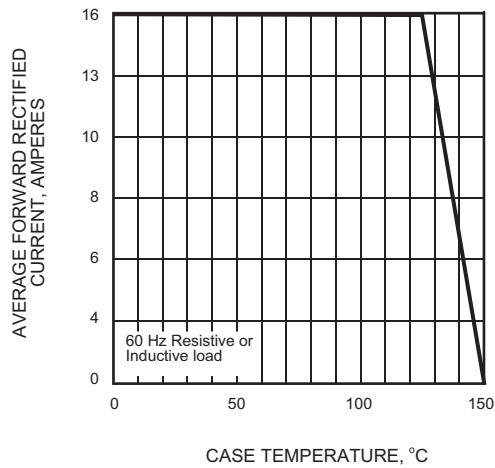


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

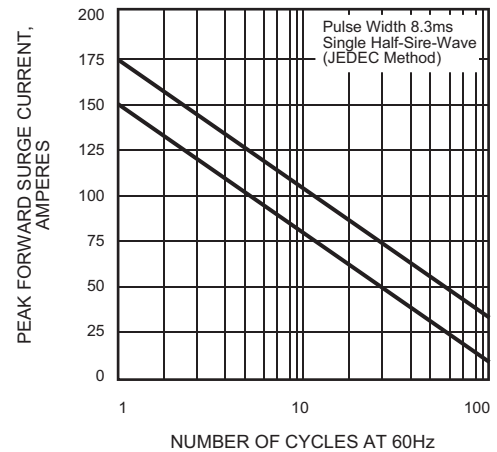


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

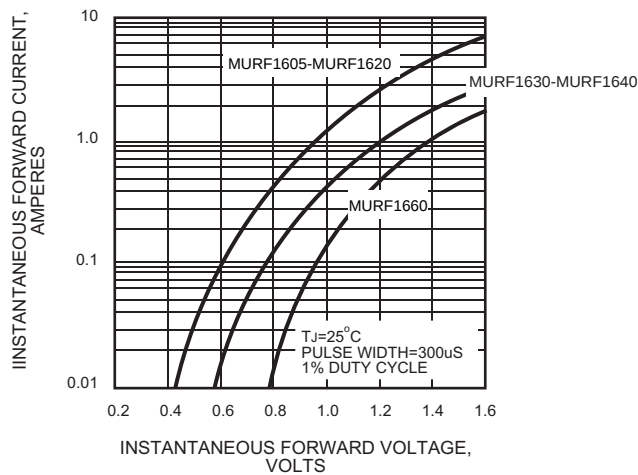


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

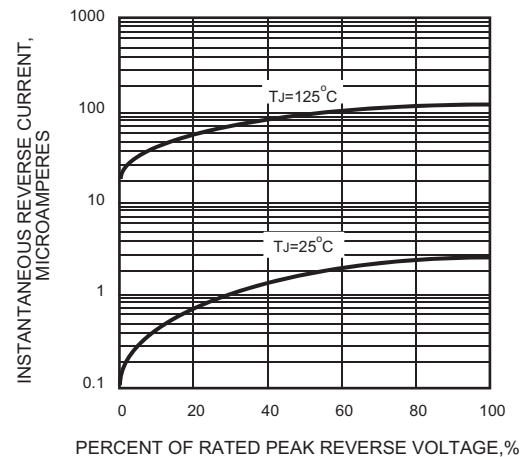


FIG.5 - TYPICAL JUNCTION CAPACITANCE

