

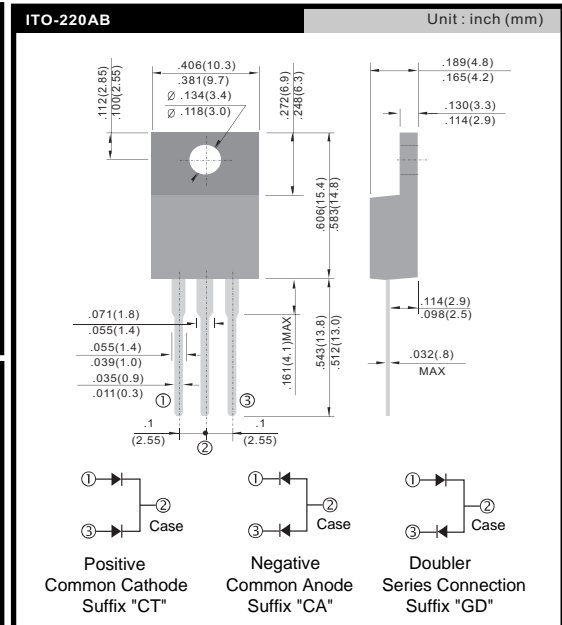
Pb Free Plating Product

MURF2005 thru MURF2060



20.0 Ampere Isolated Glass Passivated Ultrafast Recovery Rectifier

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	



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	MURF2005CT MURF2005CA MURF2005GD	MURF2010CT MURF2010CA MURF2010GD	MURF2020CT MURF2020CA MURF2020GD	MURF2030CT MURF2030CA MURF2030GD	MURF2040CT MURF2040CA MURF2040GD	MURF2060CT MURF2060CA MURF2060GD	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			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

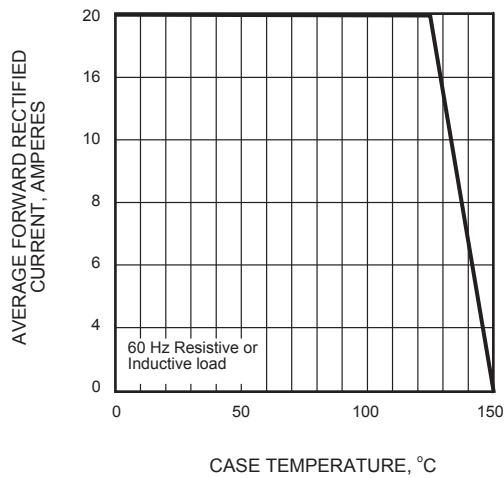


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

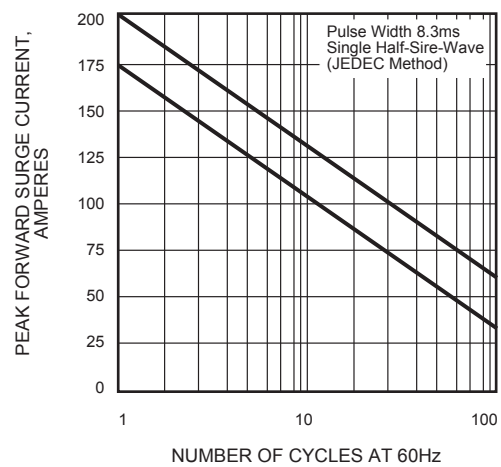


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

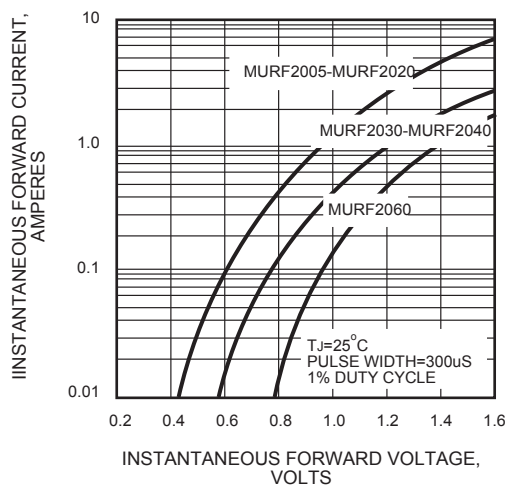


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

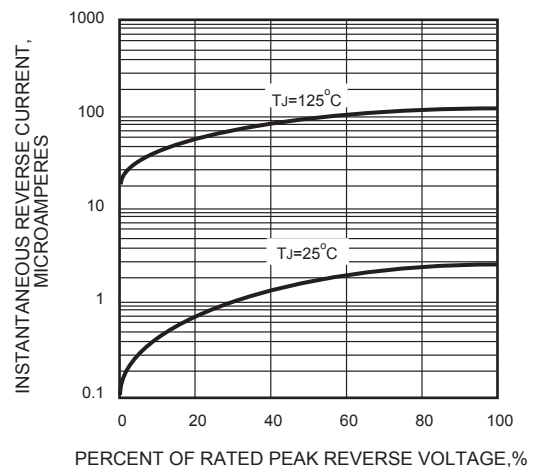


FIG.5 - TYPICAL JUNCTION CAPACITANCE

