

MURF2010CT-MURF2060CT

20.0A GLASS PASSIVATED SUPER FAST RECTIFIER

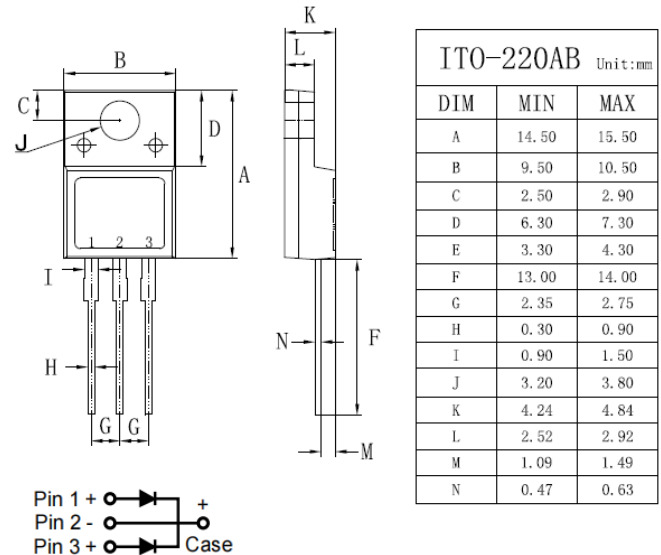
Features

- Glass Passivated Die Construction
- Super-Fast Switching
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

- Case: TO-220F, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.81 grams (approx.)
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**

TO-220F



Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	SYMBOL	MURF 2010CT	MURF 2020CT	MURF 2030CT	MURF 2040CT	MURF 2050CT	MURF 2060CT	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	300	400	500	600	V	
Maximum RMS Voltage	VRMS	70	140	210	280	350	420	V	
Maximum DC Blocking Voltage	VDC	100	200	300	400	500	600	V	
Maximum Average Forward Rectified Current $T_C=100^\circ\text{C}$	IF(AV)	20.0						A	
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	90						A	
Maximum Instantaneous Forward Voltage @10.0 A	VF	1.0		1.3		1.7		V	
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	IR	10.0 250						uA uA	
Maximum Reverse Recovery Time (Note 1)	Trr	35						nS	
Typical junction Capacitance (Note 2)	CJ	170				130			pF
Typical Thermal Resistance (Note 3)	R θ JC	3.5						$^\circ\text{C}/\text{W}$	
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150						$^\circ\text{C}$	

Note: 1. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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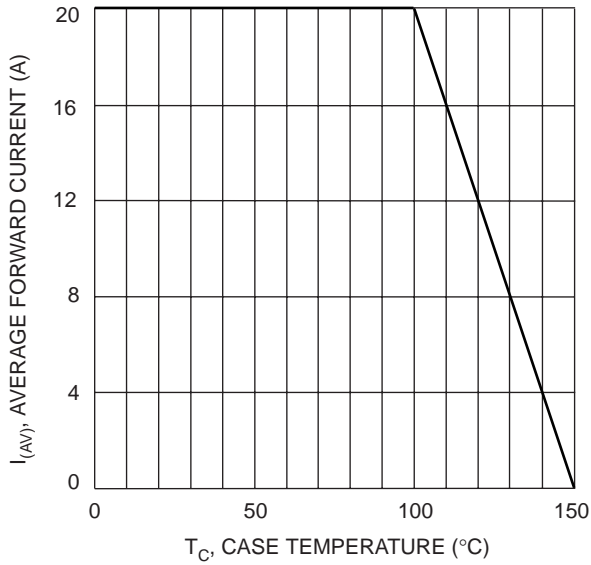


Fig. 1 Forward Current Derating Curve

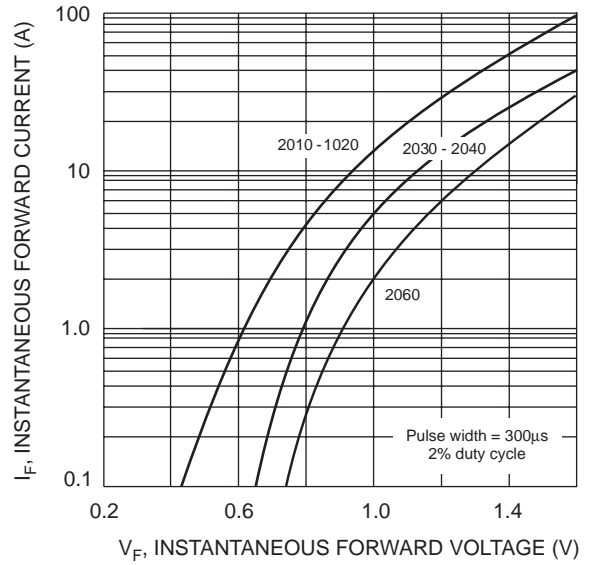


Fig. 2 Typical Forward Characteristics

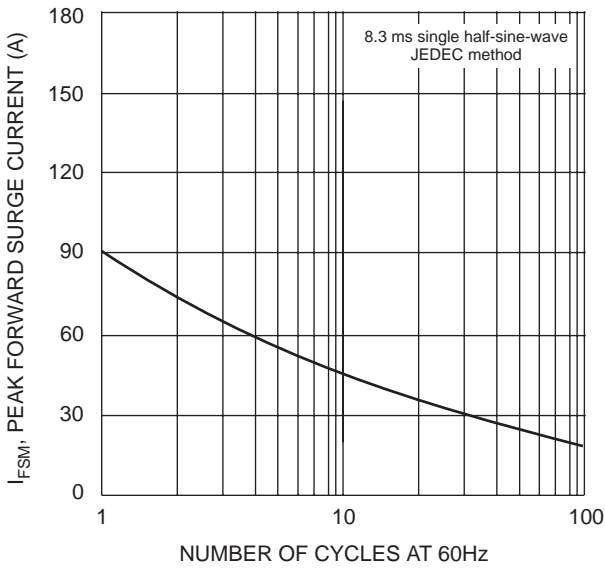


Fig. 3 Max Non-Repetitive Surge Current

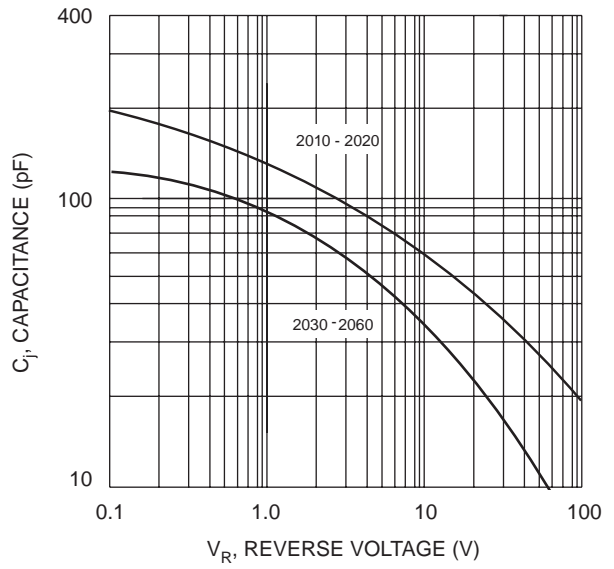


Fig. 4 Typical Junction Capacitance