

MUR1610CT – MUR1660CT

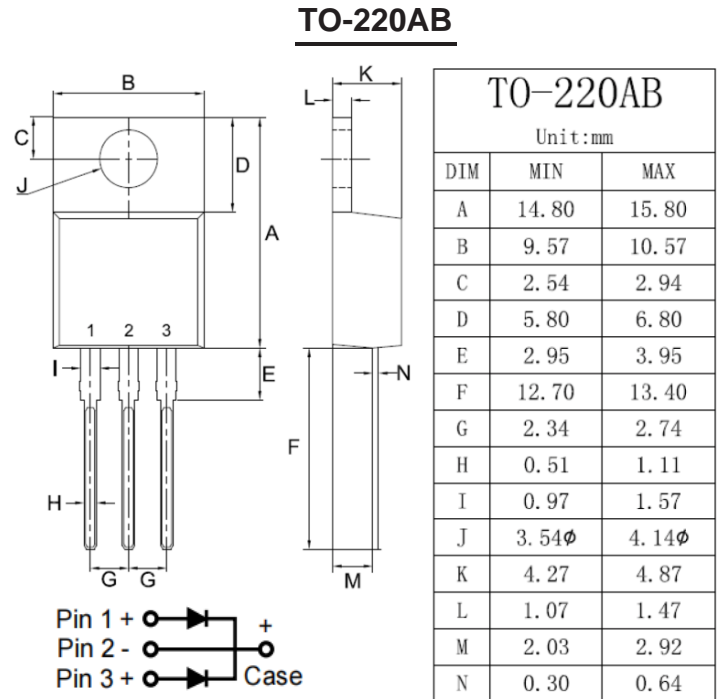
16.0A GLASS PASSIVATED SUPERFAST RECTIFIER

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-220AB, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 11.5 cm·kg (10 in·lbs) Max.
- **Lead Free: For RoHS / Lead Free Version**



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	MUR 1610CT	MUR 1620CT	MUR 1630CT	MUR 1640CT	MUR 1650CT	MUR 1660CT	Unit
Peak Repetitive Reverse Voltage	V_{RRM}							V
Working Peak Reverse Voltage	V_{RWM}	100	200	300	400	500	600	
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	210	280	350	420	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$	I_o	16.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	90						A
Forward Voltage @ $I_F = 8.0\text{A}$	V_{FM}	1.0	1.3		1.7		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	10				400		μA
Reverse Recovery Time (Note 1)	t_{rr}	35						nS
Typical Junction Capacitance (Note 2)	C_j	170				130		pF
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150						$^\circ\text{C}$

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $IRR = 0.25\text{A}$.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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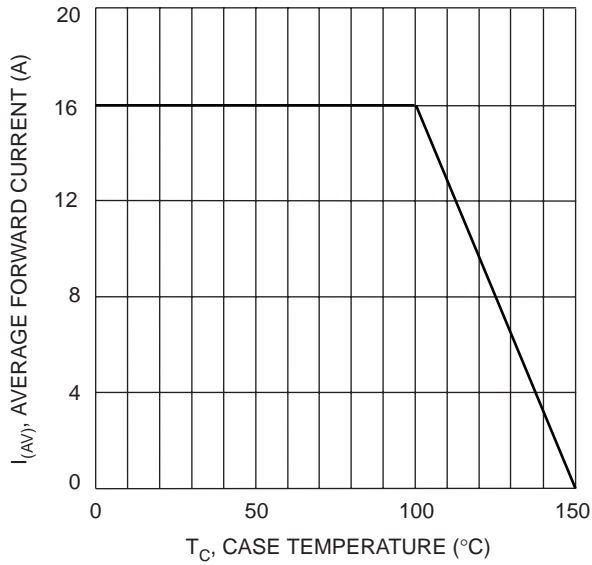


Fig. 1 Forward Current Derating Curve

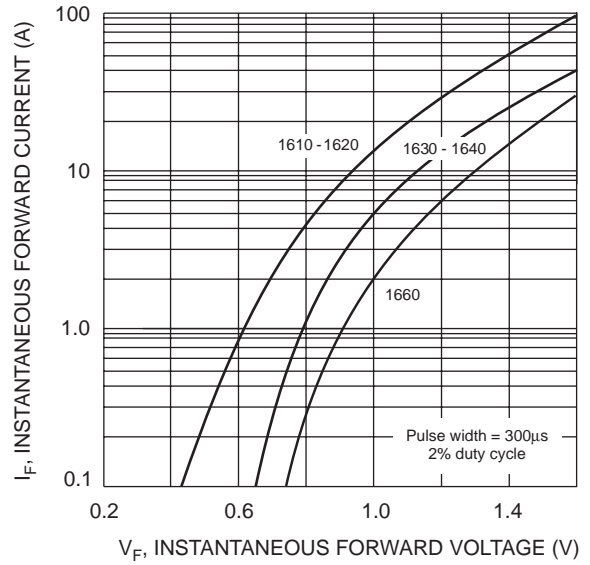


Fig. 2 Typical Forward Characteristics

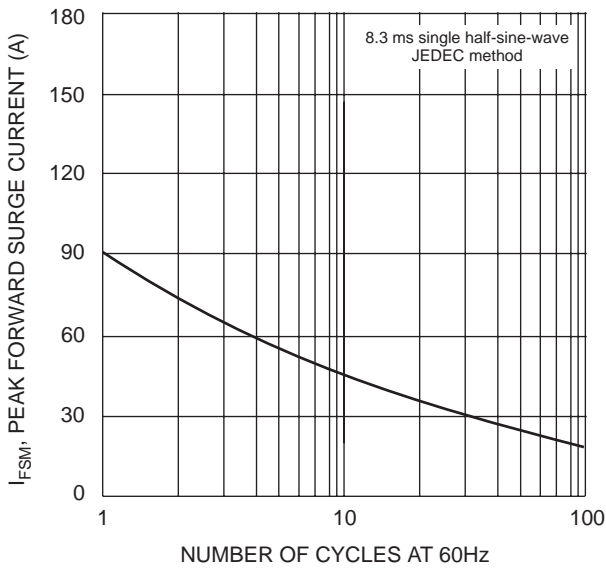


Fig. 3 Max Non-Repetitive Surge Current

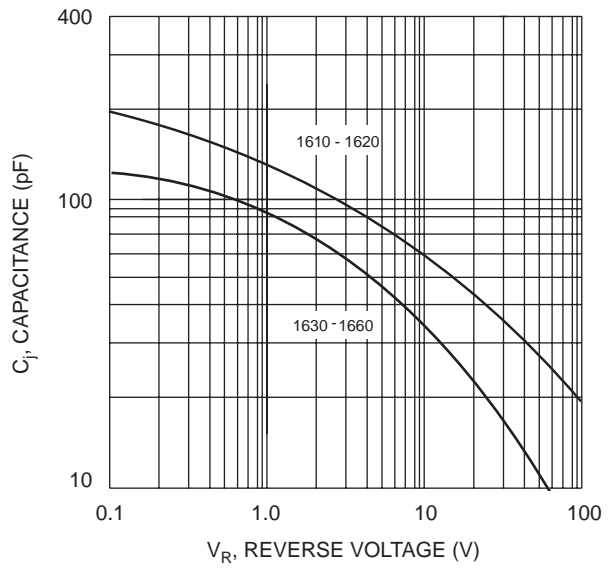


Fig. 4 Typical Junction Capacitance