

# MUR2010CT – MUR2060CT

## 20.0A GLASS PASSIVATED SUPERFAST RECTIFIER

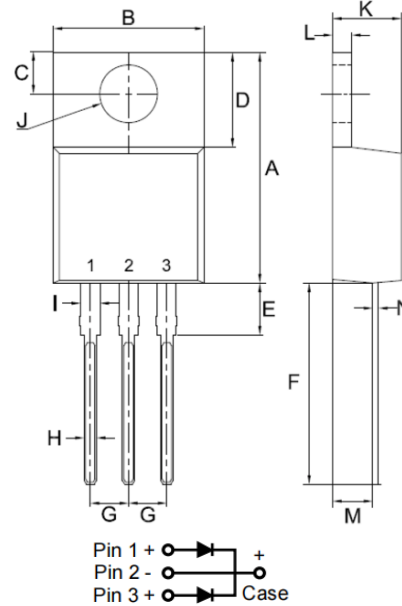
### Features

- 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**

### TO-220AB



TO-220AB		
Unit:mm		
DIM	MIN	MAX
A	14.80	15.80
B	9.57	10.57
C	2.54	2.94
D	5.80	6.80
E	2.95	3.95
F	12.70	13.40
G	2.34	2.74
H	0.51	1.11
I	0.97	1.57
J	3.54 $\phi$	4.14 $\phi$
K	4.27	4.87
L	1.07	1.47
M	2.03	2.92
N	0.30	0.64

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	MUR 2010CT	MUR 2020CT	MUR 2030CT	MUR 2040CT	MUR 2050CT	MUR 2060CT	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>							V
Working Peak Reverse Voltage	V <sub>RWM</sub>	100	200	300	400	500	600	
DC Blocking Voltage	V <sub>R</sub>							
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	140	210	280	350	420	V
Average Rectified Output Current @T <sub>C</sub> = 100°C	I <sub>o</sub>	10.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	90						A
Forward Voltage @I <sub>F</sub> =10.0A	V <sub>FM</sub>	1.0	1.3		1.7			V
Peak Reverse Current @T <sub>A</sub> = 25°C	I <sub>RM</sub>	10						μA
At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C		400						
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	35						nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	170				130		pF
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150						°C

Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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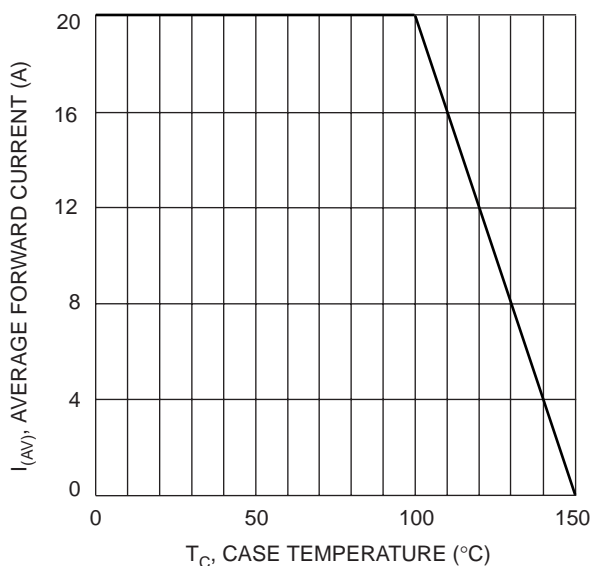


Fig. 1 Forward Current Derating Curve

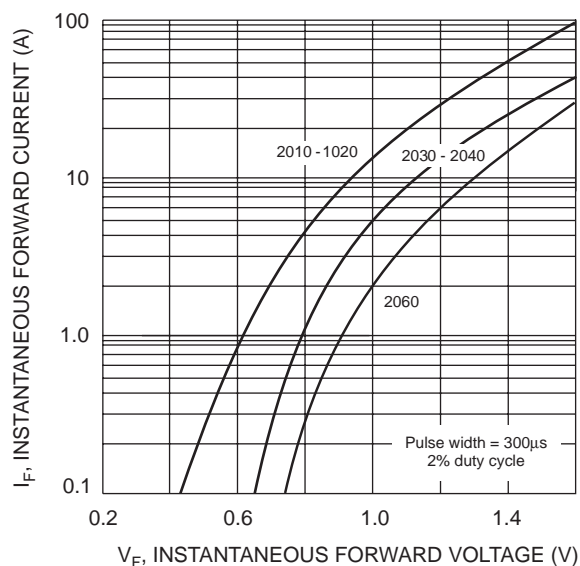


Fig. 2 Typical Forward Characteristics

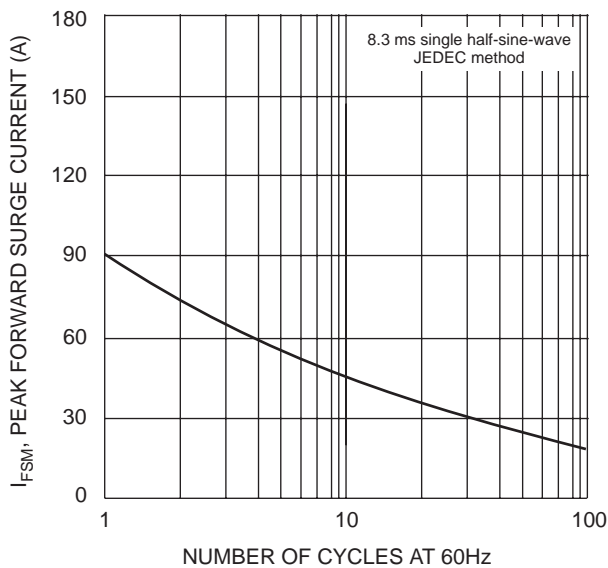


Fig. 3 Max Non-Repetitive Surge Current

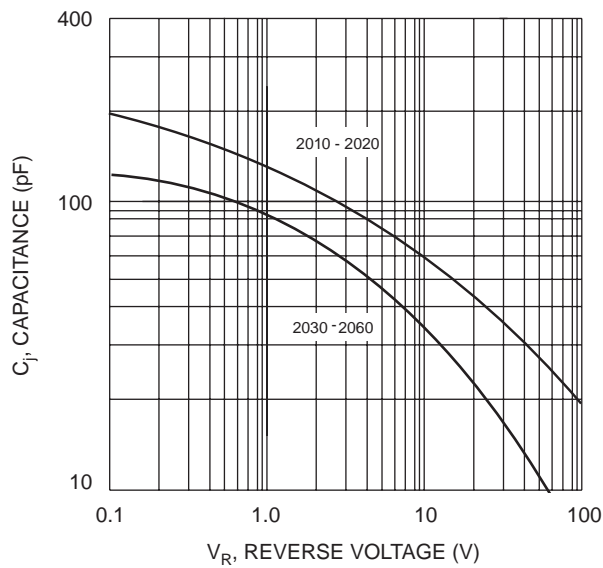


Fig. 4 Typical Junction Capacitance