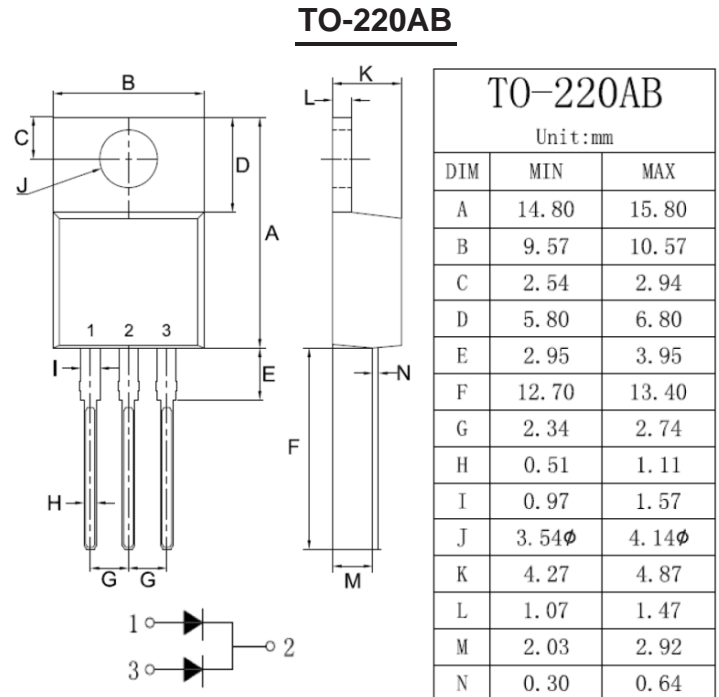


Features

- 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-0

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 5°C unless otherwise specified

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

Characteristic	Symbol	MUR 1010CT	MUR 1020CT	MUR 1030CT	MUR 1040CT	MUR 1050CT	MUR 1060CT	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°C	I _O	10.0						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 = 5 .0A	V _{FM}	1.0	1.3		1.7			V
Peak Reverse Current @T _A = 25°C	I _{RM}	10						μA
At Rated DC Blocking Voltage @T _A = 100°C		400						
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						°C

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

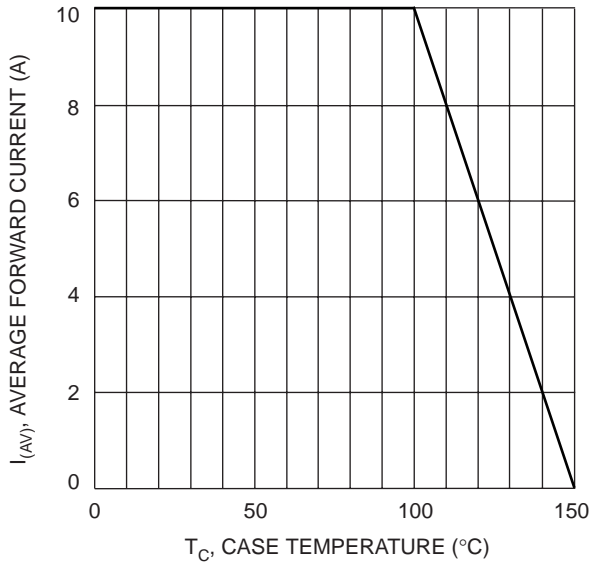


Fig. 1 Forward Current Derating Curve

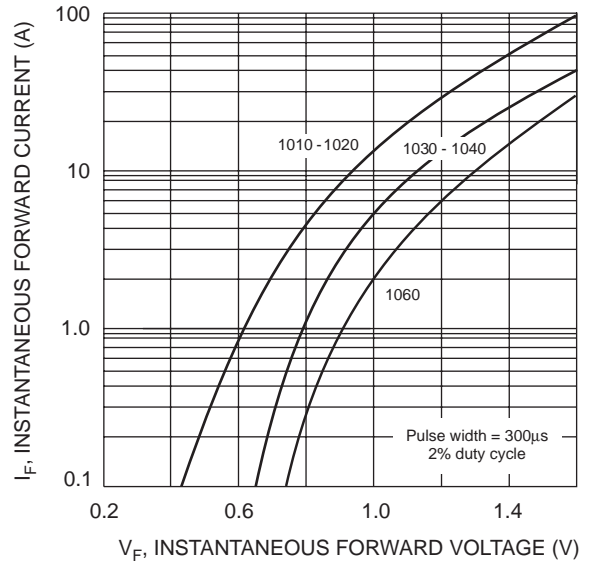


Fig. 2 Typical Forward Characteristics

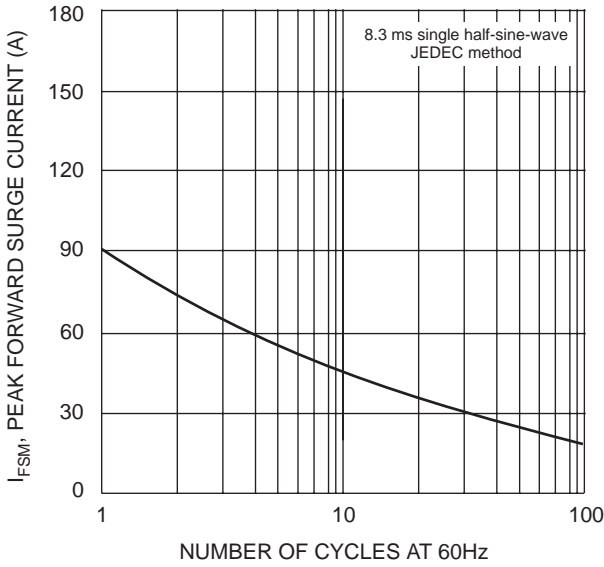


Fig. 3 Max Non-Repetitive Surge Current

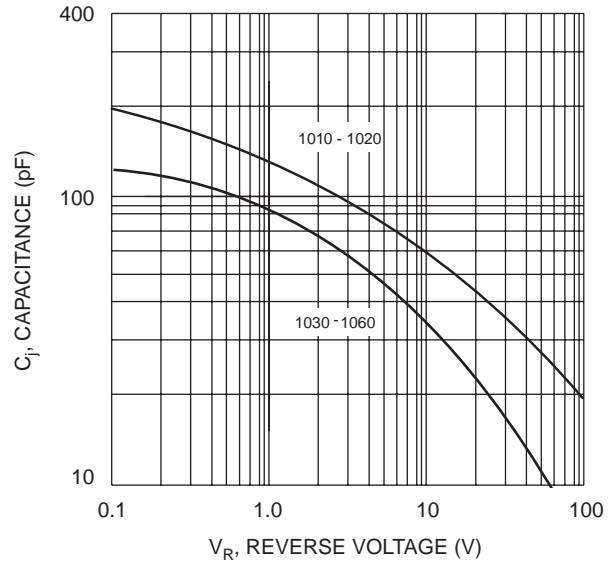


Fig. 4 Typical Junction Capacitance