

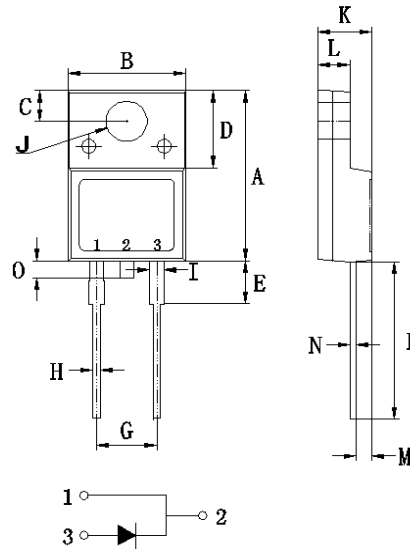
### Features

- 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: ITO-220AC, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**

### ITO-220AC



ITO-220AC Unit:mm		
DIM	MIN	MAX
A	14.50	15.50
B	9.50	10.50
C	2.50	2.90
D	6.30	7.30
E	3.30	4.30
F	13.00	14.00
G	2.35	2.75
H	0.30	0.90
I	0.90	1.50
J	3.20	3.80
K	4.24	4.84
L	2.52	2.92
M	1.09	1.49
N	0.47	0.63
O	0.00	1.50

### 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 810	MURF 820	MURF 830	MURF 840	MURF 850	MURF 860	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$							
Working Peak Reverse Voltage	$V_{RWM}$	100	200	300	400	500	600	V
DC Blocking Voltage	$V_R$							
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	210	280	350	420	V
Average Rectified Output Current @ $T_C = 105^\circ\text{C}$	$I_o$	8.0						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						$\mu\text{A}$
Reverse Recovery Time (Note 1)	$t_{rr}$	35						nS
Typical Junction Capacitance (Note 2)	$C_j$	80				50		pF
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150						$^\circ\text{C}$

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

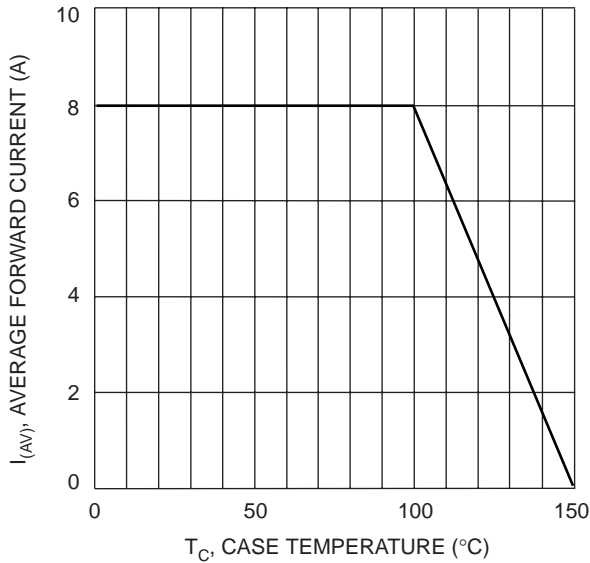


Fig. 1 Forward Current Derating Curve

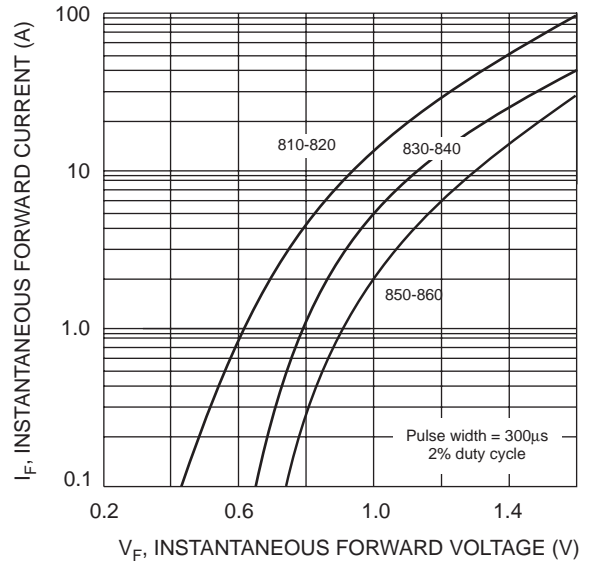


Fig. 2 Typical Forward Characteristics

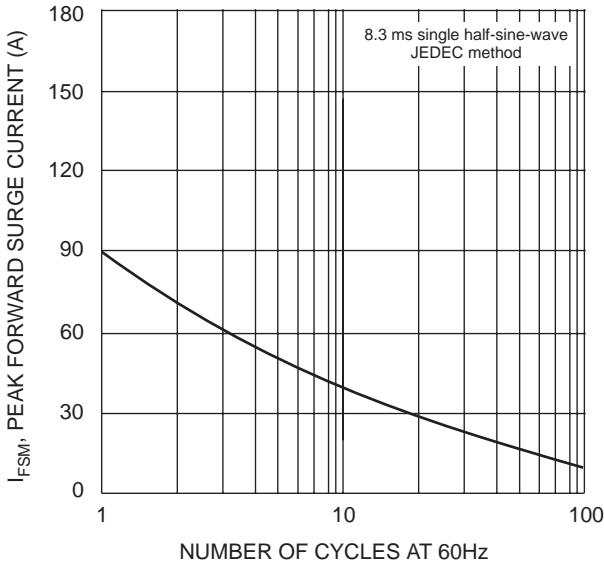


Fig. 3 Max Non-Repetitive Surge Current

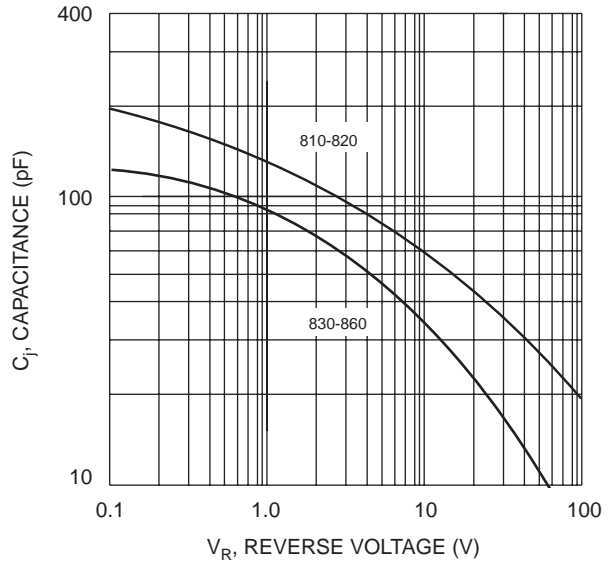


Fig. 4 Typical Junction Capacitance