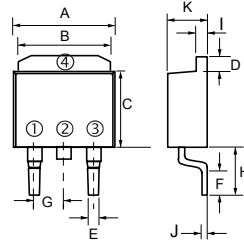


Features

- 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

DPAK/TO-252AC



DPAK/TO-252		
DIM.	MIN.	MAX.
A	6.30	6.80
B	5.10	5.50
C	5.90	6.30
D	0.88	1.28
E	0.51	0.90
F	1.38	1.75
G	2.19	2.39
H	2.90	3.30
I	0.40	0.61
J	0.40	0.61
K	2.20	2.40
All Dimensions in millimeter		

Mechanical Data

- Case: TO-252AC(DPAK), 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**



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	MUR 810S	MUR 820S	MUR 830S	MUR 840S	MUR 850S	MUR 860S	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	100	200	300	400	500	600	V
Working Peak Reverse Voltage	V _{RWM}							
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	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 = 8.0A	V _{FM}	1.0	1.3		1.7			V
Peak Reverse Current @T _A = 25°C	I _{RM}	2.0						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	80				50		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.

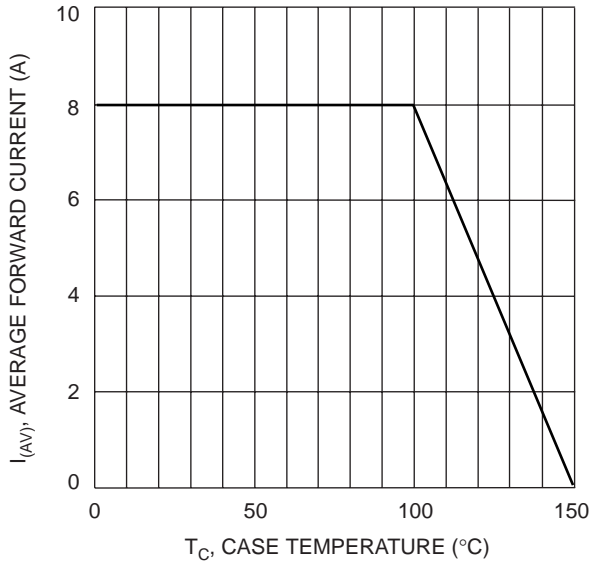


Fig. 1 Forward Current Derating Curve

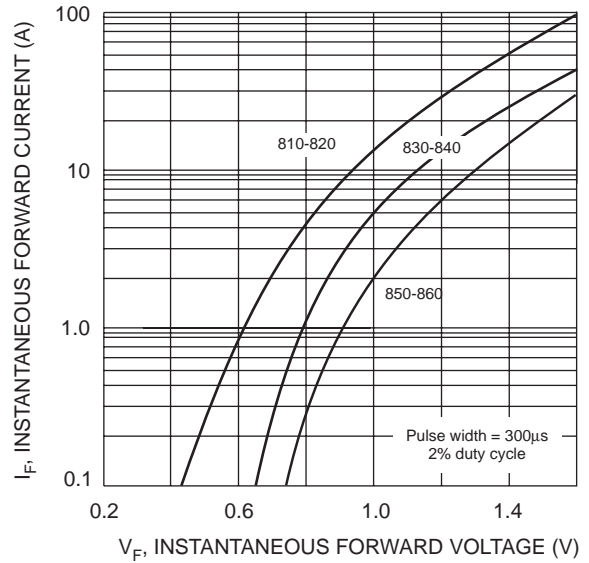


Fig. 2 Typical Forward Characteristics

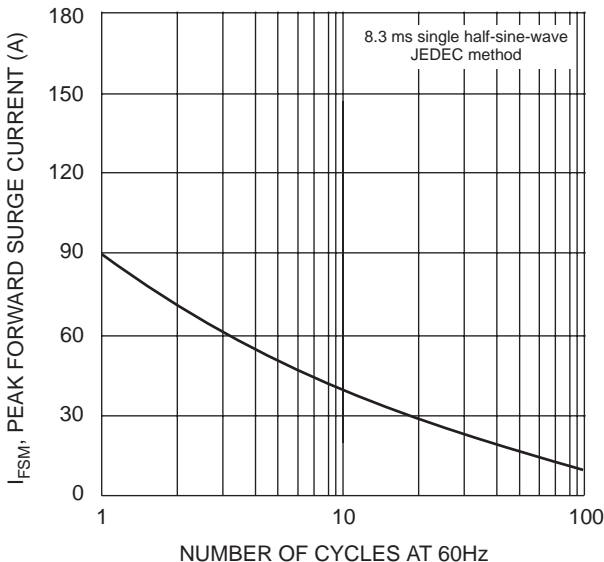


Fig. 3 Max Non-Repetitive Surge Current

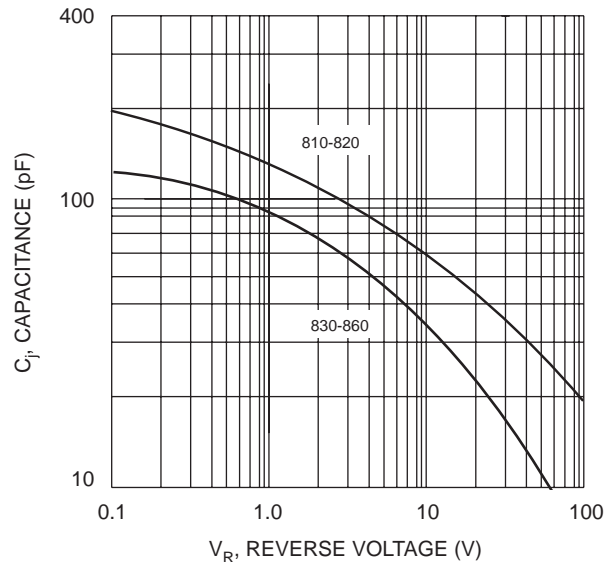
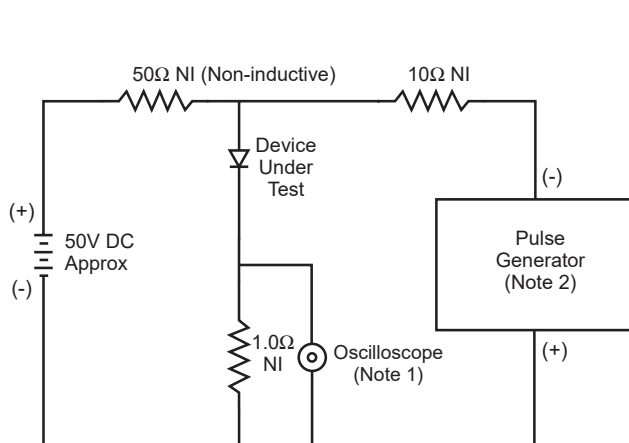
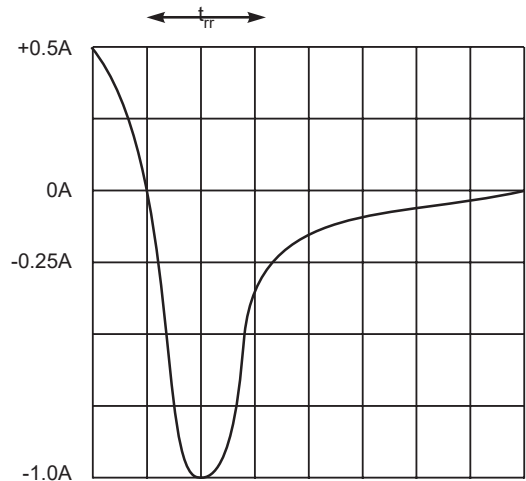


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit



Set time base for 5/10ns/cm