

MUR810F~MUR860F

SUPERFAST RECOVERY RECTIFIER

VOLTAGE 100 to 600 Volt **CURRENT** 8.0 Ampere

ITO-220AC

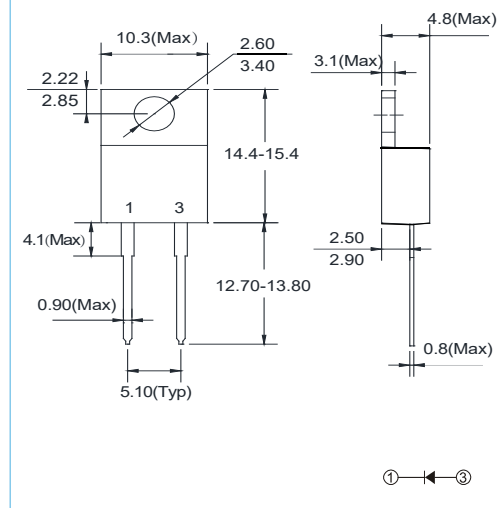
Unit:mm

FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Low leakage.
- High surge capability.
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MUR810F	MUR820F	MUR840F	MUR860F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	V
Maximum Average Forward Current at See Fig 1	$I_{F(AV)}$	8				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	125				A
Maximum Forward Voltage at 8A (Note 1)	V_F	0.95		1.3	1.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=100^{\circ}C$	I_R		5 500			μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35		50		ns
Typical Junction Capacitance (Note 2)	C_J	65				pF
Typical thermal Resistance (Note 3)	$R_{\theta JC}$	3				$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150				$^{\circ}C$

NOTES:

1. Pulse Test with PW=300 μ sec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions : $I_F=0.5A, I_R=1A, I_{rr}=0.25A$
3. Mounted on P.C. Board with 14mm² (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

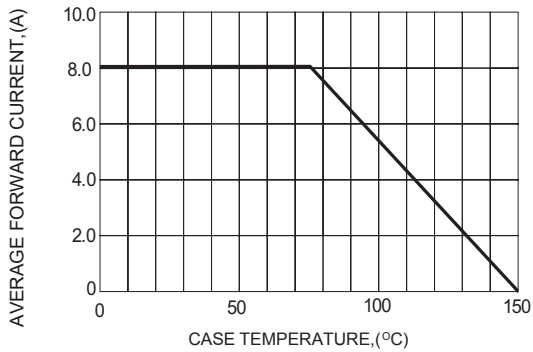


Fig. 1 Forward Current Derating Curve

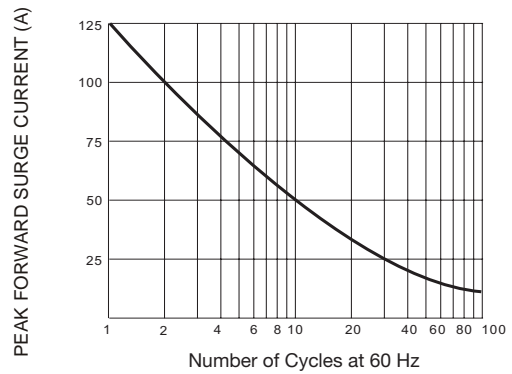


Fig. 2 Surge Current Derating Curve

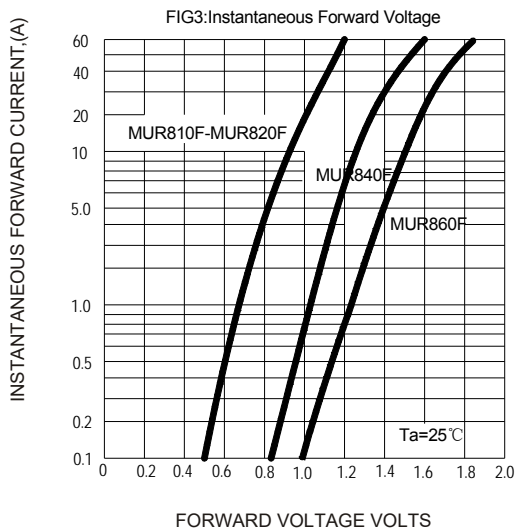


Fig. 3 Typical Forward Characteristics

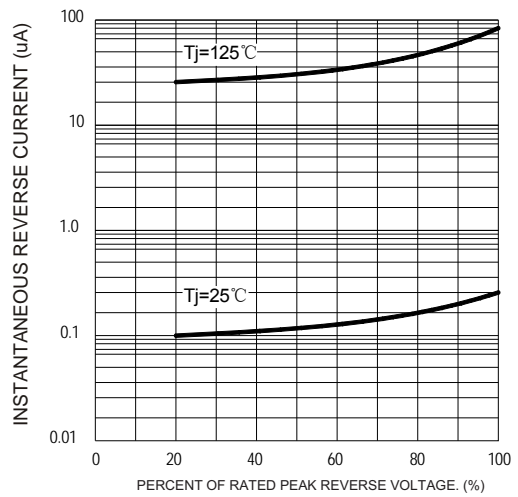
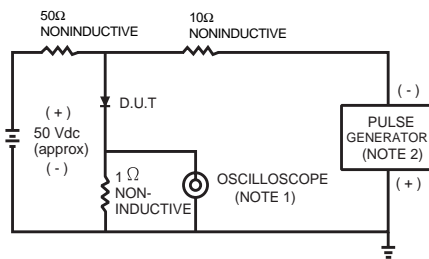


Fig. 4 Typical Reverse Characteristics



NOTES:
 3. Rise time = 7.0 ns max; Input impedance = 1.0 megaohm 22 pf.
 4. Rise time = 10 ns max; Source impedance = 50 ohms.

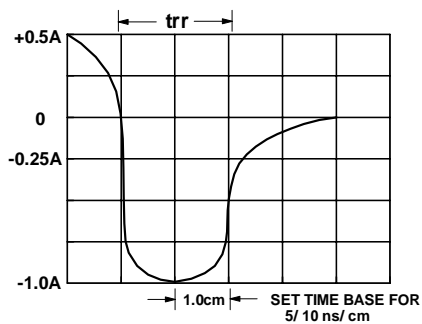


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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ORDER INFORMATION

- Packing information

Part Number	Case	DELIVERY MODE	QUANTITY
MUR810F~MUR860F	ITO-220AC	Tube	1000/BOX