MUR820 THRU MUR860

Superfast Recovery Rectifiers

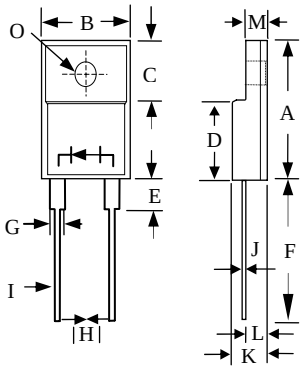
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability.
- High surge capability
- Ultra fast recovery time,high voltage.
- Lead free in comply with EU RoHS.

MECHANICAL DATA

- Case: ITO-220AC molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

ITO-220AC



ITO-220AC		
DIM.	MIN.	MAX.
A	14.90	15.90
B	9.90	10.40
C	6.45	6.95
D	8.05	8.85
E	2.90	3.90
F	12.8	——
G	1.10	1.4
H	4.95	5.05
I	0.45	0.95
J	0.40	0.65
K	4.35	4.80
L	2.45	2.85
M	2.50	2.85
O	∅3.00	∅3.50
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MUR820	MUR840	MUR860	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current at T_C=100°C	$I_{F(AV)}$	8			A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	110			A
Maximum Forward Voltage at 8A	V_F	1	1.3	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C / T_J=125°C	I_R	10 500			μA
Maximum Thermal Resistance (Note 2)	$R_{\theta JC}$	5			°C / W
Typical Junction Capacitance	C_J	80		50	pF
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35			ns
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150			°C

NOTES:

1. Reverse Rcovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
2. Thermal resistance from Junction to ambient and from junction to lead 0.375" (9.5mm) P.C.B mounte

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig.1 FORWARD CURRENT DERATING CURVE

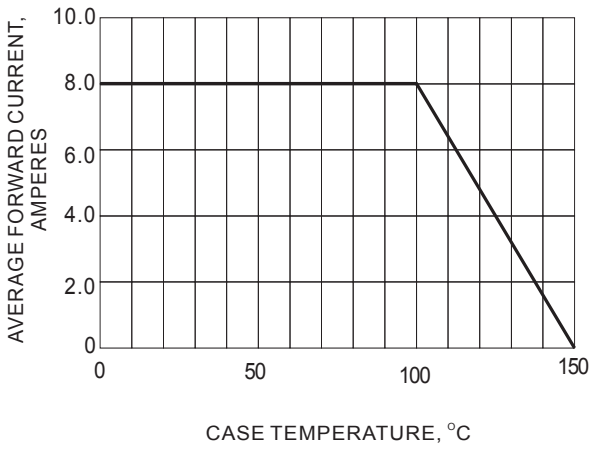


Fig.2 FORWARD CHARACTERISTICS

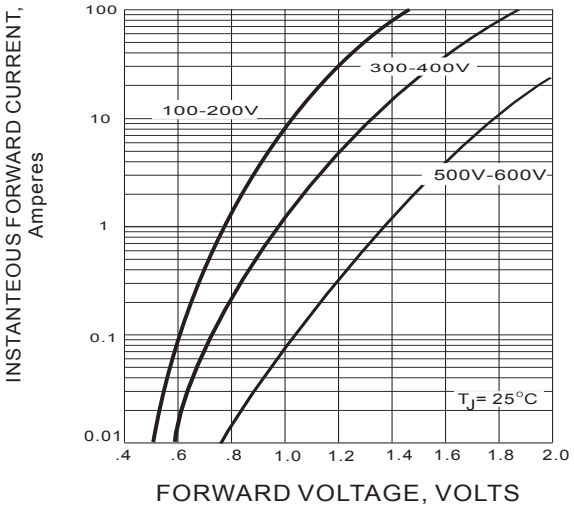


Fig.3 PEAK FORWARD SURGE CURRENT

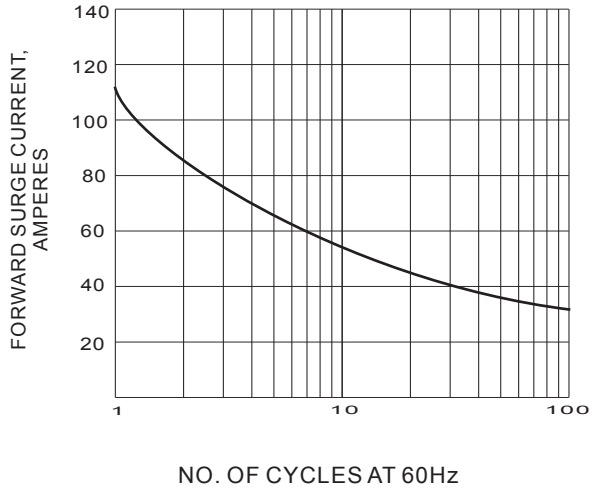


Fig.4 TYPICAL REVERSE CHARACTERISTICS

