迪一電子®

MURF1010~MURF1060

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE	100 to 600 Volts
CURRENT	10 Amperes

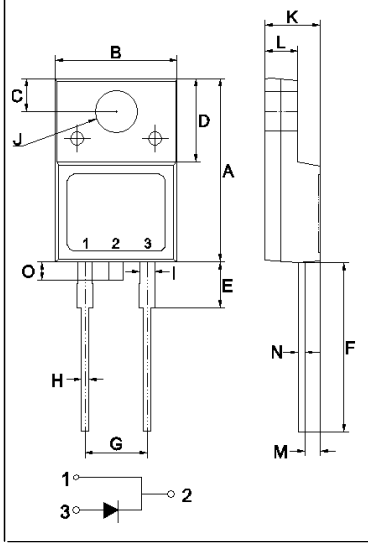
FEATURES

- 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 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	4.90	5.30
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	0.64
O	0.00	1.50

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	MURF 1010	MURF 1020	MURF 1030	MURF 1040	MURF 1050	MURF 1060	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	500	600	V
Maximum Average Forward Current at T_C = 100°C	$I_{F(AV)}$	10						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	90						A
Maximum Forward Voltage at 10A	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
Typical Junction Capacitance (Note 1)	C_J	200						pF
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35						ns
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	3						°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150						°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
3. Thermal resistance from Junction to case.

RATING AND CHARACTERISTIC CURVES

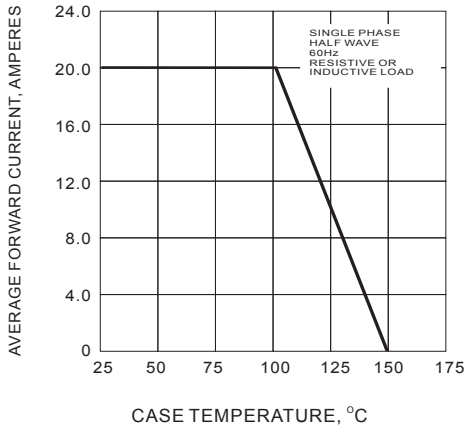


Fig.1 FORWARD CURRENT DERATING CURVE

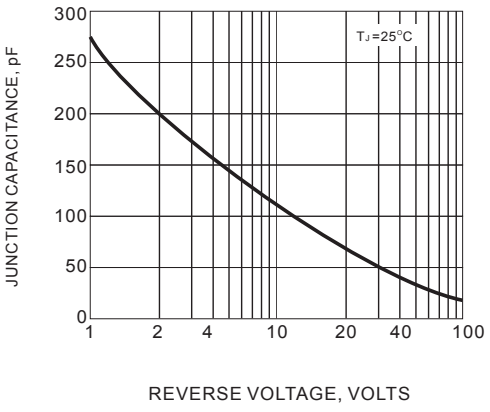


Fig.2 TYPICAL JUNCTION CAPACITANCES

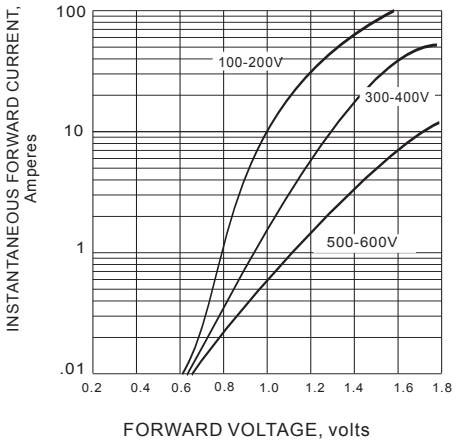


Fig.3 FORWARD CHARACTERISTICS

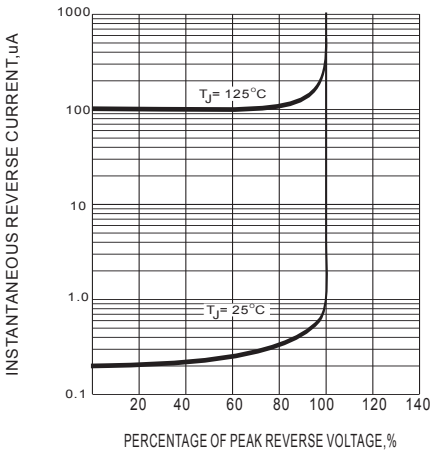


Fig.4 TYPICAL REVERSE CHARACTERISTICS

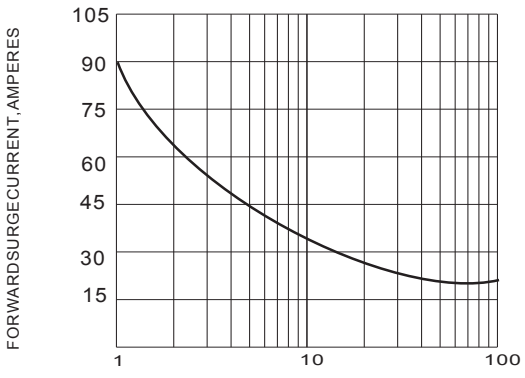


Fig.5 PEAK FORWARD SURGE CURRENT

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