迪一電子®

MURF1040GCT

ULTRAFAST RECOVERY RECTIFIERS

400 Volt 10Ampere

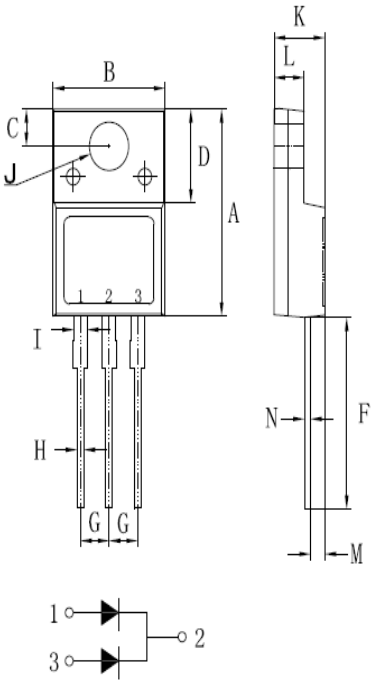
ITO-220AB

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Ultra fast recovery time, high voltage.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANCAL DATA

- Case: ITO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any



ITO-220AB 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

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	MURF1040GCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Maximum Forward Voltage at10A	V_F	1.3	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=25°C T_A=125°C	I_R	8 500	μA
Typical Junction Capacitance (Note 1)	C_J	60	pF
Maximum Reverse Recovery Time (Note 2)	t_{rr}	50	ns
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2	°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 VDC.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
3. Thermal resistance from Junction to case.
4. Both Bonding and Chip structure are available.

MURF1040GCT

RATING AND CHARACTERISTIC CURVES

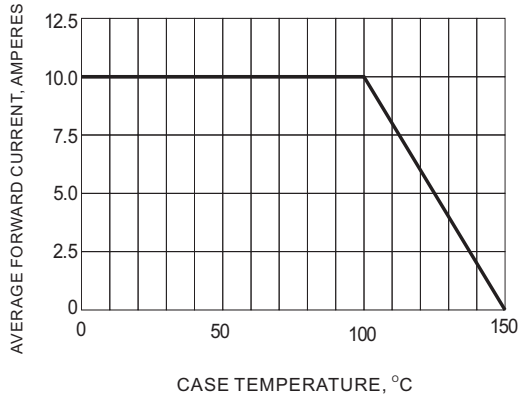


Fig.1 FORWARD CURRENT DERATING CURVE

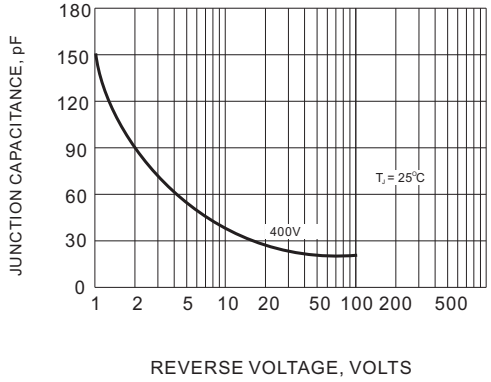


Fig.2 TYPICAL JUNCTION CAPACITANCES

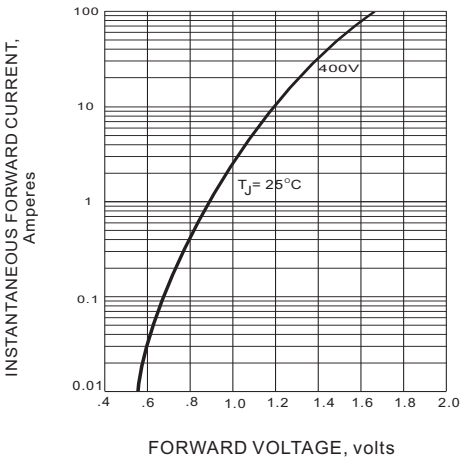


Fig.3 FORWARD CHARACTERISTICS

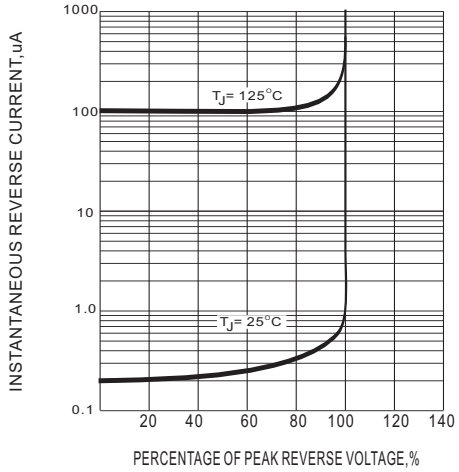


Fig.4 TYPICAL REVERSE CHARACTERISTICS

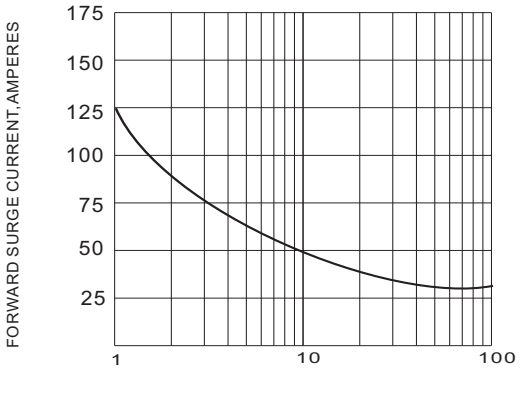


Fig.5 PEAK FORWARD SURGE CURRENT

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