

Features

- ◇ UL Recognized File # E-326243
- ◇ Ultrafast 35 and 60 Nanosecond Recovery times
- ◇ 175°C operating Junction Temperature
- ◇ Popular ITO-220AB Package
- ◇ Epoxy meets UL94, V0 @ 1/8"
- ◇ High temperature glass passivated junction
- ◇ High voltage capability to 600 volts
- ◇ Low leakage specified @ 150°C case temperature
- ◇ Current derating @ both case and ambient temperatures
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ◇ Case: Epoxy, molded
- ◇ Terminal: Pure tin plated, lead free
- ◇ Lead temperature for soldering purposes:
260°C Max. for 10 seconds
- ◇ Finish: all external surfaces corrosion resistant and terminal leads are readily solderable
- ◇ Shipped 50 units per plastic tube
- ◇ Weight: 1.9 grams

Ordering Information (example)

Part No.	Package	Packing	Packing code	Packing code (Green)
MURF1620CT	ITO-220AB	50 / TUBE	C0	C0G

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	MURF 1620CT	MURF 1640CT	MURF 1660CT	Units
Maximum Repetitive 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	$I_{F(AV)}$	16			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100			A
Maximum Instantaneous Forward Voltage (Note 1) @ $I_F=8$ A, $T_A=25^\circ\text{C}$ @ $I_F=8$ A, $T_A=125^\circ\text{C}$	V_F	0.975 0.895	1.3 1.1	1.5 1.2	V
Maximum Reverse Current @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	5 250	10 500		μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	25	50		ns
Typical Thermal Resistance	$R_{\theta JC}$	3.0	2.0		$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to + 150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to + 150			$^\circ\text{C}$

Note 1: Pulse lest: $t_p = 300\mu\text{s}$, Duty Cycle < 1%

Note 2: Reverse Recovery Test Condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$

RATINGS AND CHARACTERISTIC CURVES (MURF1620CT THRU MURF1660CT)

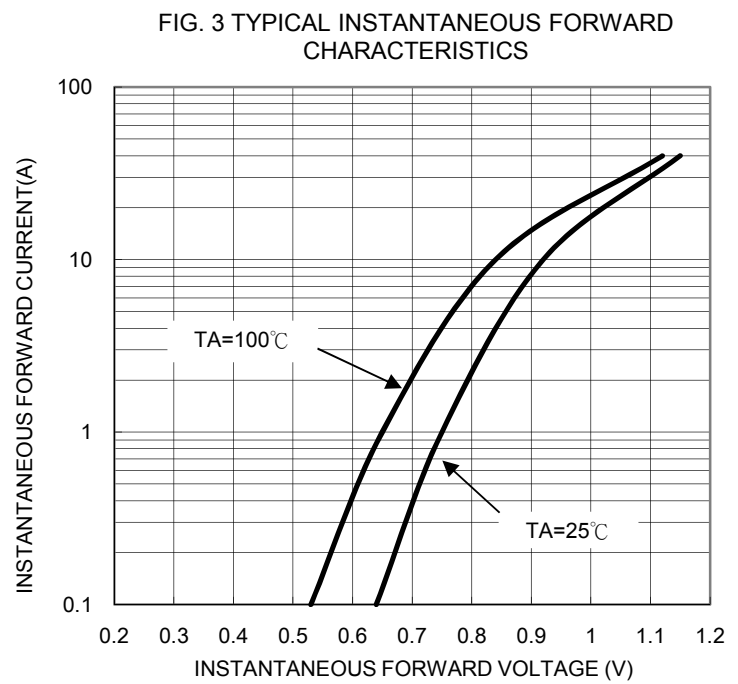
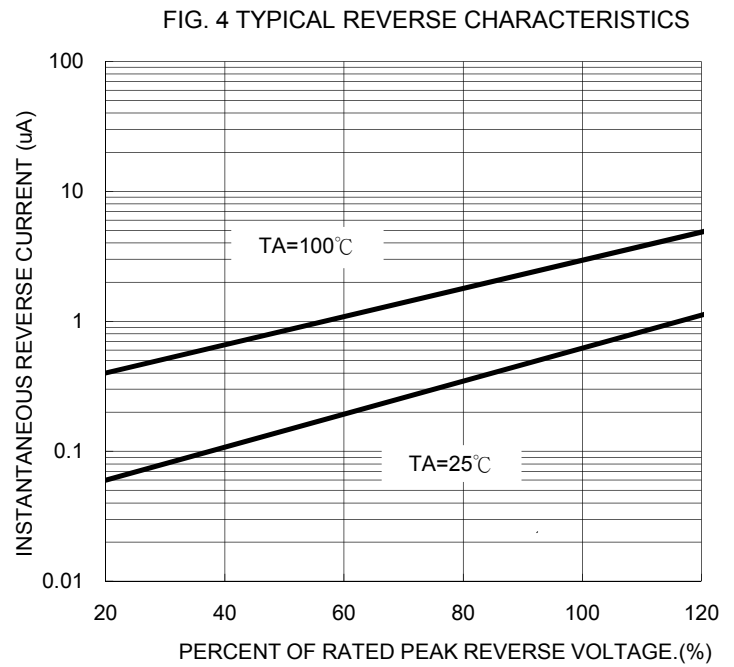
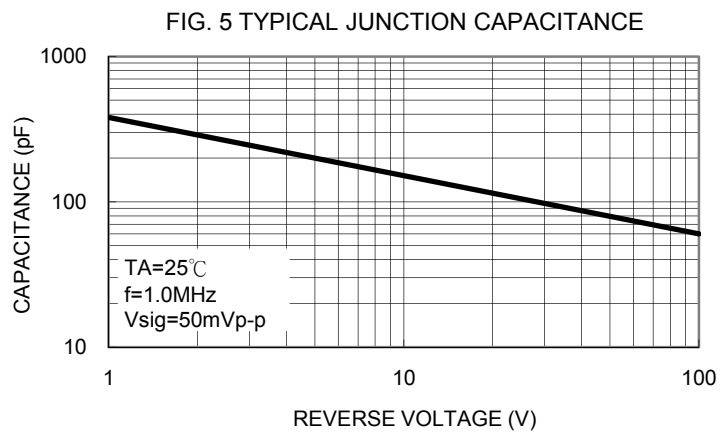
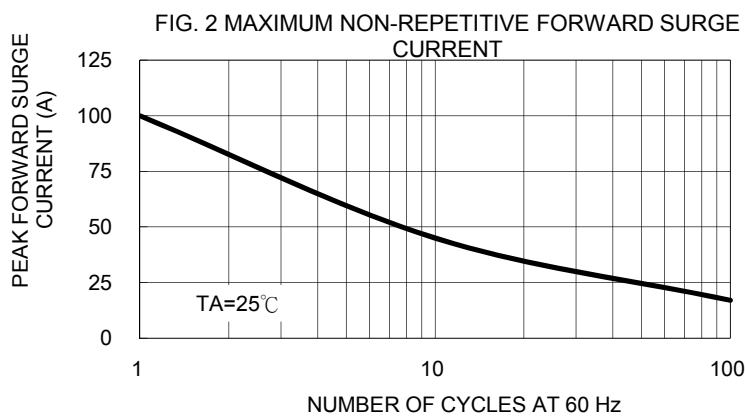
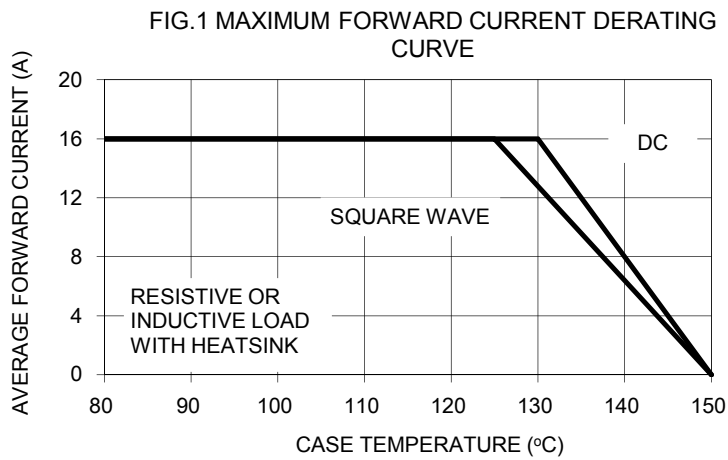
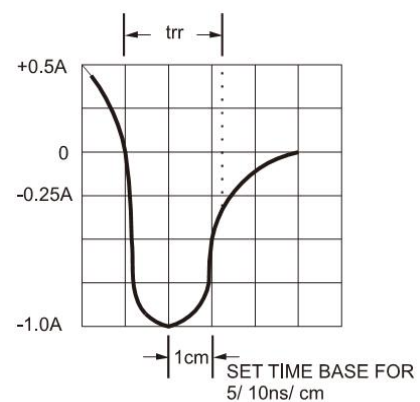
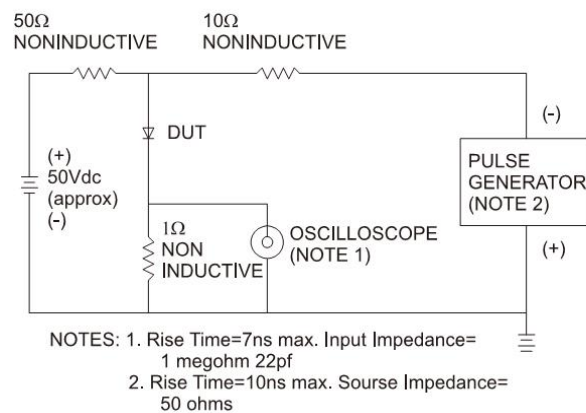


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

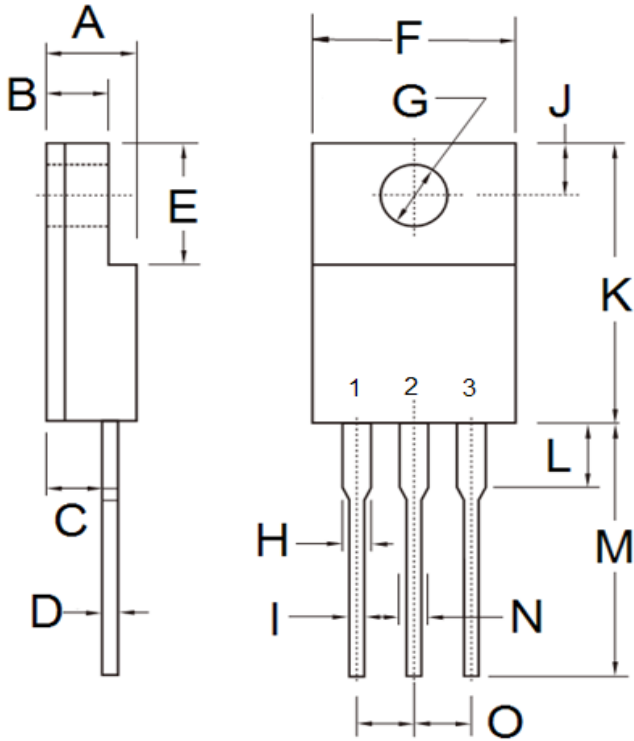


Ordering information

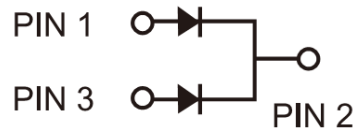
Part No.	Package	BULK Packing	Packing code	Packing code (Green)
MURF16xxCT	ITO-220AB	50 / TUBE	C0	C0G

Note: "xx" is Device Code from "20" thru "60".

Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	4.30	4.70	0.169	0.185
B	2.50	3.16	0.098	0.124
C	2.30	2.96	0.091	0.117
D	0.46	0.76	0.018	0.030
E	6.30	6.90	0.248	0.272
F	9.60	10.30	0.378	0.406
G	3.00	3.40	0.118	0.134
H	0.95	1.45	0.037	0.057
I	0.50	0.90	0.020	0.035
J	2.40	3.20	0.094	0.126
K	14.80	15.50	0.583	0.610
L	-	4.10	-	0.161
M	12.60	13.80	0.496	0.543
N	-	1.80	-	0.071
O	2.41	2.67	0.095	0.105



Marking Diagram



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code