

Features

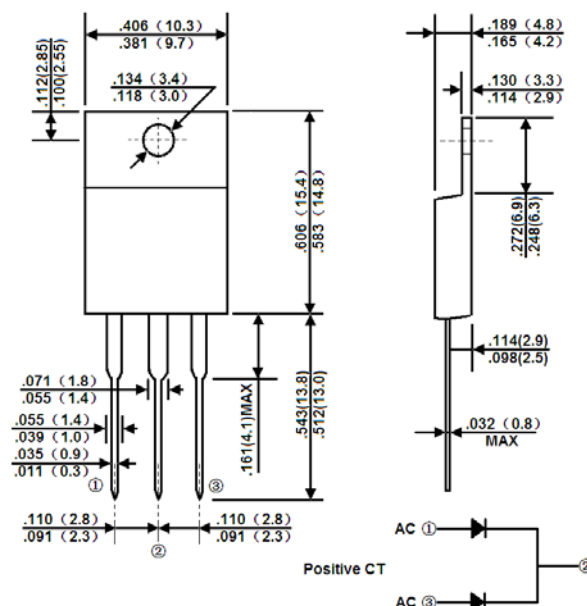
- * Ultrafast 35 and 60 Nanosecond Recovery times
- * 175°C operating Junction Temperature
- * Popular ITO-220AB Package
- * Epoxy meets UL94, V0 @ 1/8"
- * High temperature glass passivated junction
- * High voltage capability to 600 volts
- * Low leakage specified @ 150°C case temperature
- * Current derating @ both case and ambient temperatures



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

ITO-220AB:



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

Maximum Ratings and Electrical Characteristics

Rating 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%.

Type Number	Symbol	MURF1620CT	MURF1640CT	MURF1660CT	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum D.C Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	16			A
Peak Forward Surge Current, 8.3ms 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 D.C Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=125^\circ\text{C}$	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 and Storage Temperature Range	T_J/T_{STG}	-55 to +150			$^\circ\text{C}$

Note:1、 Pulse Test with PW=300 usec, 1% Duty Cycle 2、 Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$

Ratings and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

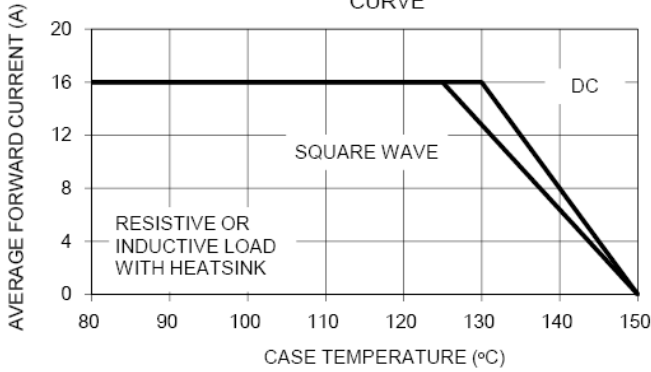


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

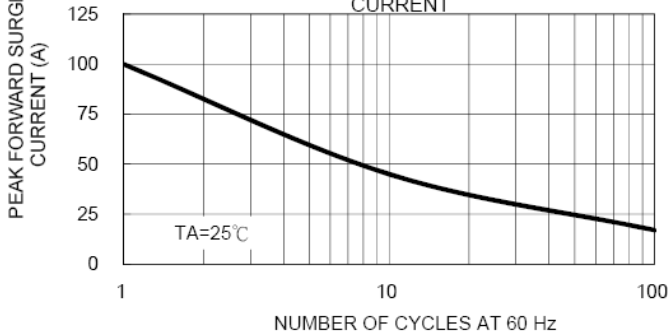


FIG. 5 TYPICAL JUNCTION CAPACITANCE

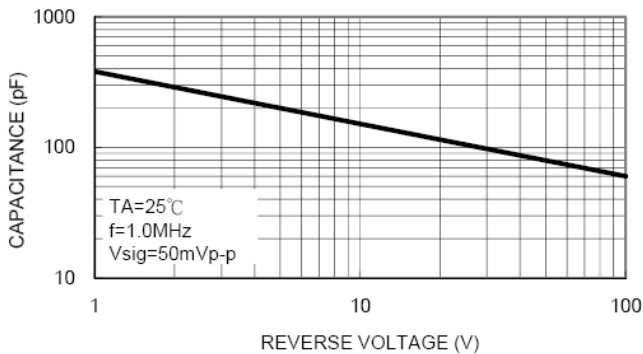


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

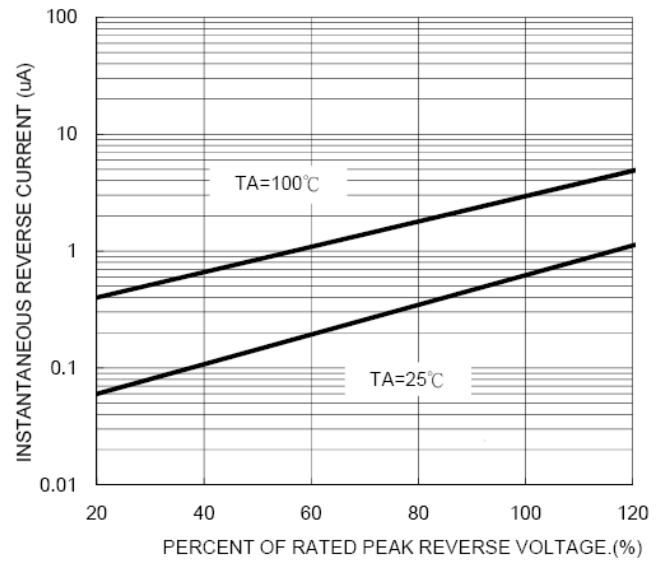


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

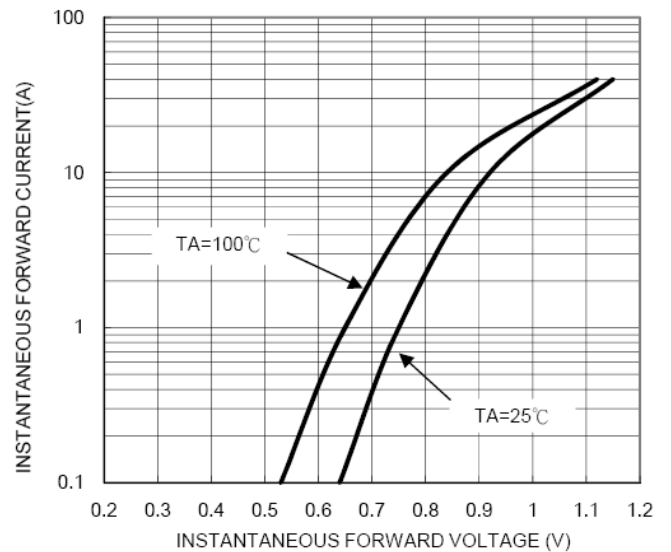
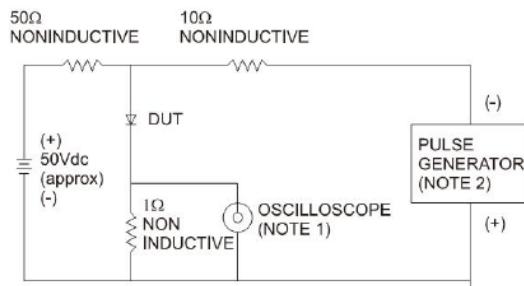
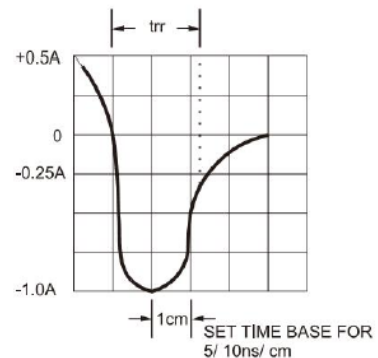


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Source Impedance= 50 ohms





MURF1620CT THRU MURF1660CT

Switch mode Power Rectifiers

Ordering Information

Part No.	Package	Packing
MURF1620CT-MURF1660CT	ITO-220AB	50pcs/Tube