



Micro Commercial Components  
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# MURF1005CT THRU MURF1040CT

## Features

- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- Super fast recovery times, high voltage
- Case : ITO-220AB Full Molded Plastic Package

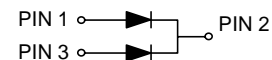
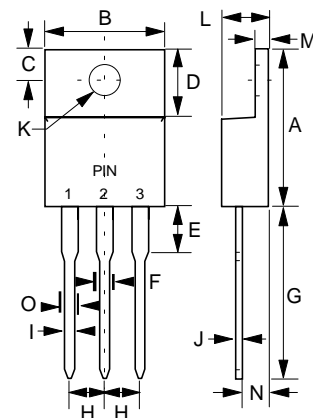
**10 Amp  
 Isolation Super Fast  
 Recovery Rectifier  
 50 to 400 Volts**

## Maximum Ratings

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURF1005CT	50V	35V	50V
MURF1010CT	100V	70V	100V
MURF1015CT	150V	105V	150V
MURF1020CT	200V	140V	200V
MURF1030CT	300V	210V	300V
MURF1040CT	400V	280V	400V

## ITO-220AB



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1005CT-1020CT 1030CT-1040CT	$V_F$	.95V 1.30V	$T_J = 25^\circ\text{C}$ $I_{FM} = 5\text{A};$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5uA 500uA	$T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$
Maximum Reverse Recovery Time 1005CT-1020CT 1030CT-1040CT	$T_{rr}$	35ns 50ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.583	.606	14.80	15.40	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	---	.100	---	2.55	
I	---	.035	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	∅
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	

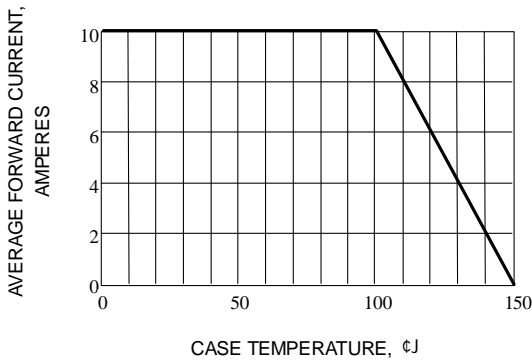


Fig. 1-FORWARD CURRENT DERATING CURVE

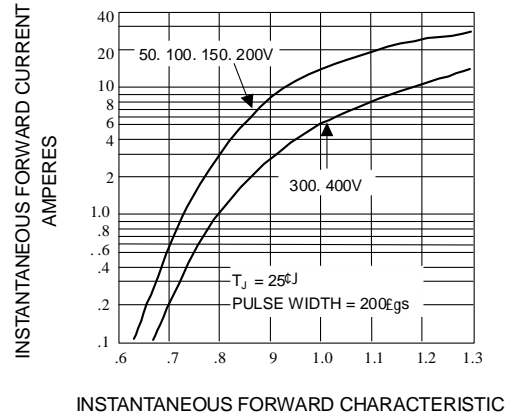


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

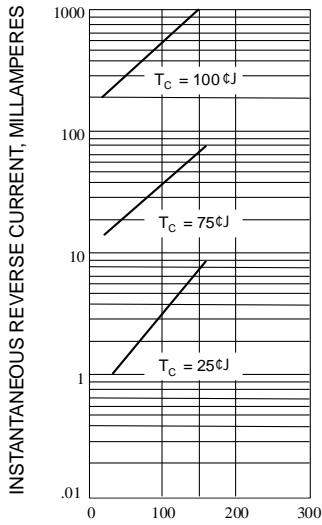


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

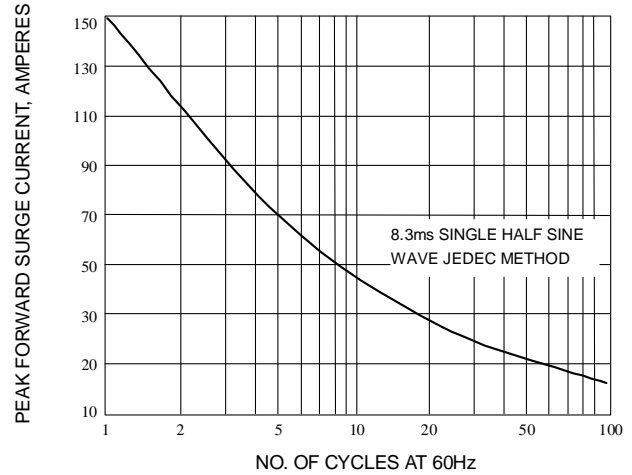


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

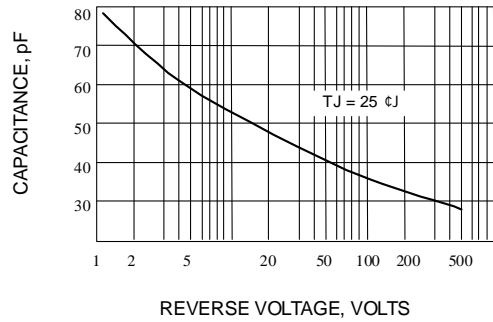


Fig. 5-TYPICAL JUNCTION CAPACITANCE