

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Surge Forward Current Capability
- Glass Passivated Chip
- Halogen Free Available Upon Request By Adding Suffix "-HF"

Maximum Ratings

- Operating Junction Temperature Range: -50°C to +150°C
- Storage Temperature Range: -50°C to +150°C
- Typical Thermal Resistance: 2°C/W Junction to Case

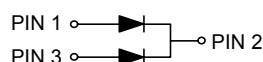
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1005FCT	MUR1005FCT	50V	35V	50V
MUR1010FCT	MUR1010FCT	100V	70V	100V
MUR1015FCT	MUR1015FCT	150V	105V	150V
MUR1020FCT	MUR1020FCT	200V	140V	200V
MUR1040FCT	MUR1040FCT	400V	280V	400V
MUR1060FCT	MUR1060FCT	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	$T_C=90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage MUR1005FCT-1020FCT MUR1040FCT MUR1060FCT	V_F	0.975V 1.3V 1.5V	$I_{FM}=5A$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μ A 500 μ A	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$
Typical Junction Capacitance	C_J	62pF	Measure at 1MHz, $V_R=4.0V$
Maximum Reverse Recovery Time MUR1005FCT-1020FCT MUR1040FCT-1060FCT	t_{rr}	35ns 50ns	$I_F=0.5A; I_R=1.0A;$ $I_{rr}=0.25A$

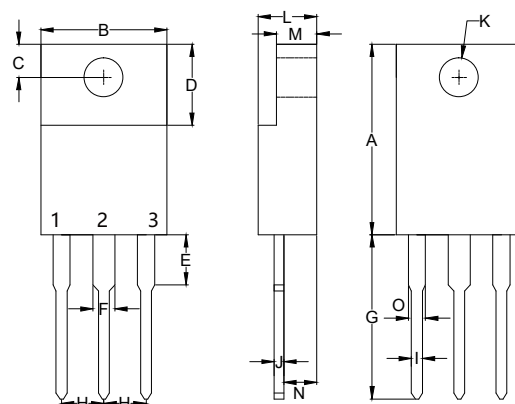
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

Internal Structure



10 Amp Super Fast Recovery Rectifier 50 to 600 Volts

ITO-220AB



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.567	0.642	14.40	16.30	
B	-----	0.421	-----	10.70	
C	0.085	0.128	2.15	3.25	
D	0.248	0.272	6.30	6.90	
E	-----	0.177	-----	4.50	
F	-----	0.071	-----	1.80	
G	0.500	0.539	12.70	14.20	
H	0.100		2.55		
I	-----	0.035	-----	0.90	
J	-----	0.032	-----	0.80	
K	0.102	0.150	2.60	3.80	Φ
L	-----	0.201	-----	5.10	
M	-----	0.140	-----	3.56	
N	0.083	0.126	2.10	3.20	
O	-----	0.071	-----	1.80	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

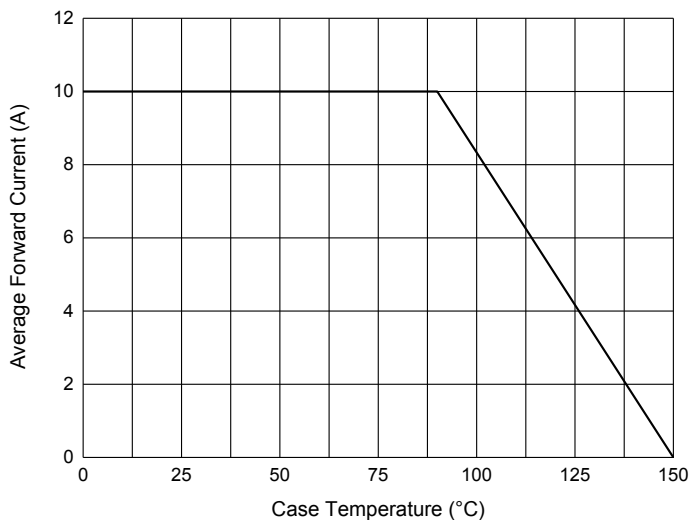


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

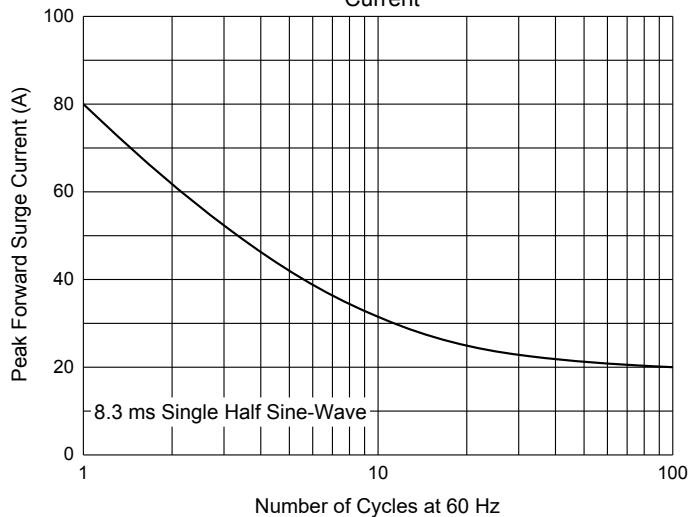


Fig. 3 - Typical Instantaneous Forward Characteristics

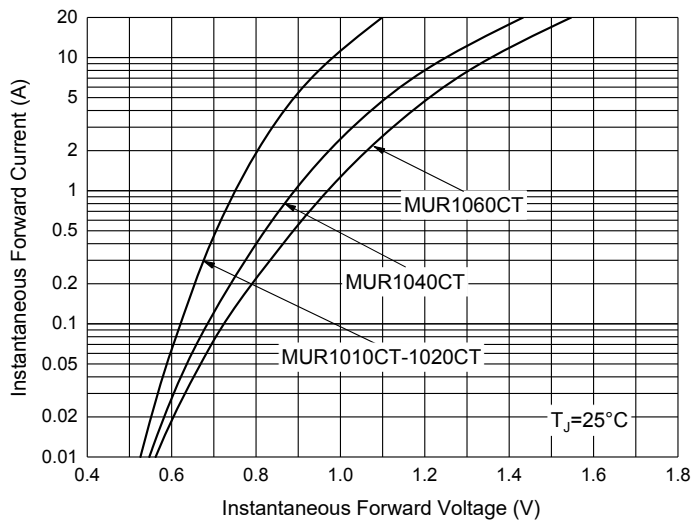
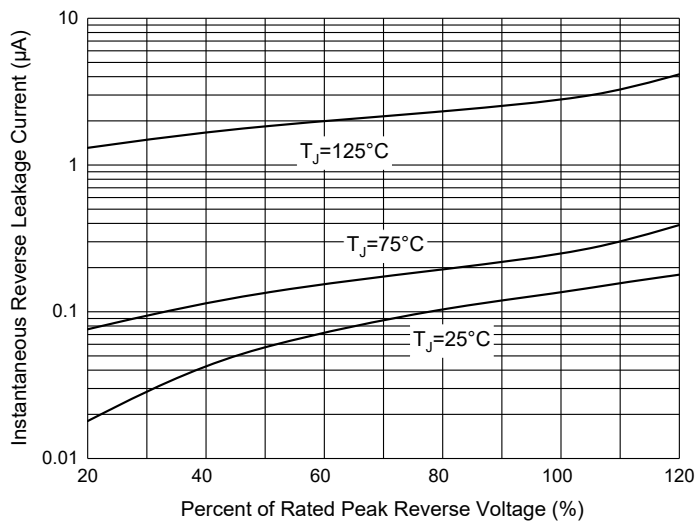


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube, 1Kpcs/Box,5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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