

Features

- Low Forward Voltage, High Current Capability
- High Surge Capacity
- Super Fast Recovery Times, High Voltage
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2.5°C/W Junction to Case

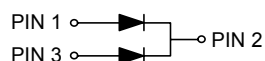
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1605FCT	MUR1605FCT	50V	35V	50V
MUR1610FCT	MUR1610FCT	100V	70V	100V
MUR1615FCT	MUR1615FCT	150V	105V	150V
MUR1620FCT	MUR1620FCT	200V	140V	200V
MUR1630FCT	MUR1630FCT	300V	210V	300V
MUR1640FCT	MUR1640FCT	400V	280V	400V
MUR1660FCT	MUR1660FCT	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	$T_C=90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	120A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage MUR1605FCT-1620FCT MUR1630FCT-1640FCT MUR1660FCT	V_F	0.95V 0.85V 1.3V 1.1V 1.7V 1.5V	$I_{FM}=8A, T_A=25^\circ\text{C};$ $I_{FM}=8A, T_A=125^\circ\text{C};$ $I_{FM}=8A, T_A=25^\circ\text{C};$ $I_{FM}=8A, T_A=125^\circ\text{C};$ $I_{FM}=8A, T_A=25^\circ\text{C};$ $I_{FM}=8A, T_A=125^\circ\text{C};$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 500 μA	$T_A=25^\circ\text{C};$ $T_A=150^\circ\text{C}$
Maximum Reverse Recovery Time MUR1605FCT-1620FCT MUR1630FCT-1660FCT	t_{rr}	35ns 50ns	$I_F=0.5A; I_R=1.0A;$ $I_{rr}=0.25A$

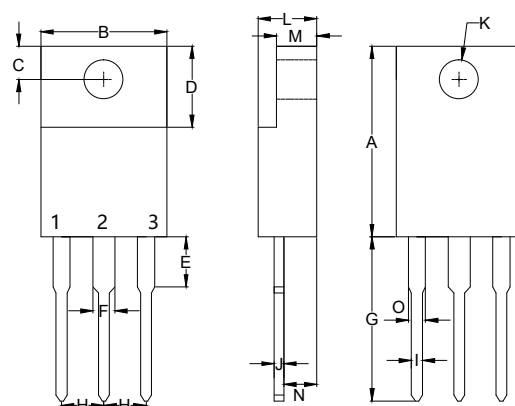
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

Internal Structure



16 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

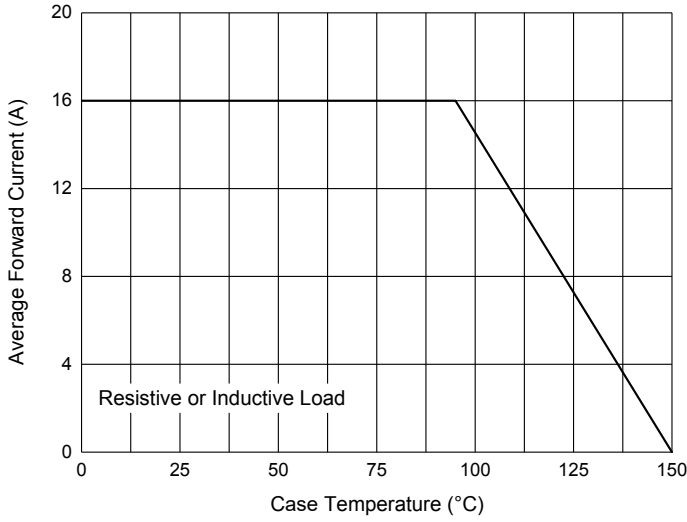


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

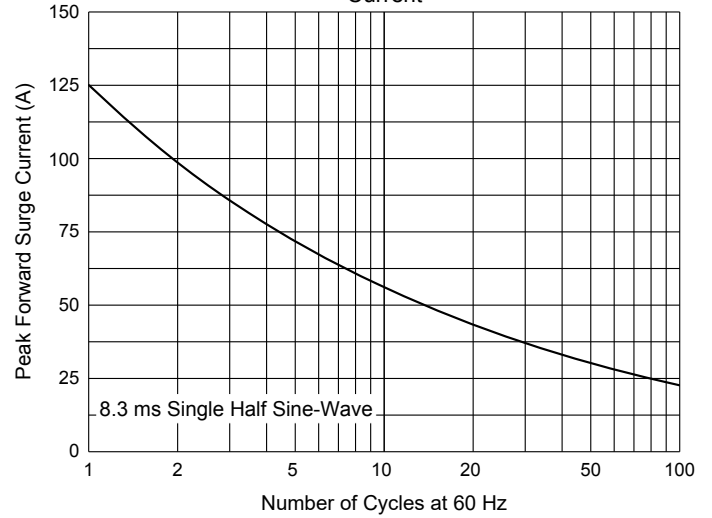


Fig. 3 - Typical Instantaneous Forward Characteristics

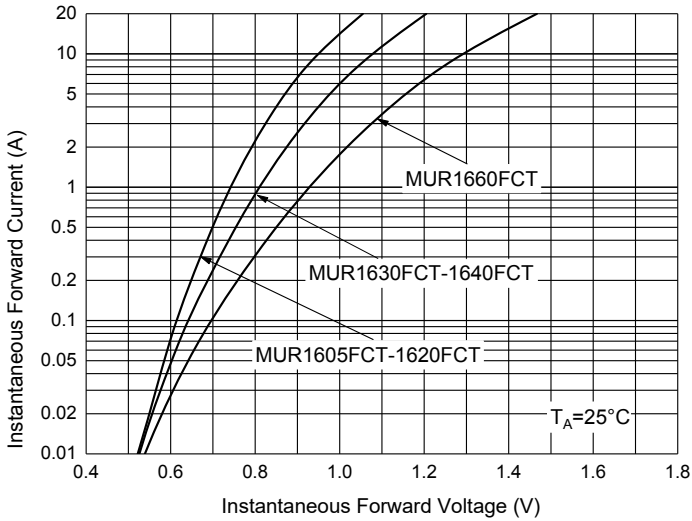


Fig. 4 - Typical Reverse Leakage Characteristics

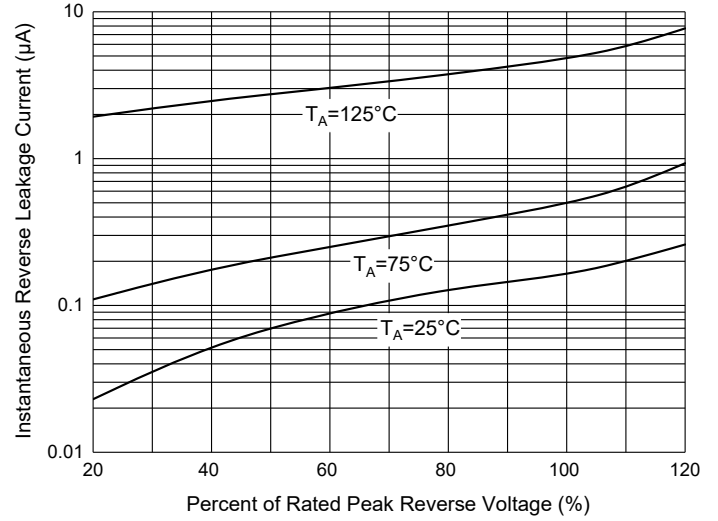


Fig. 5 - Typical Instantaneous Forward Characteristics

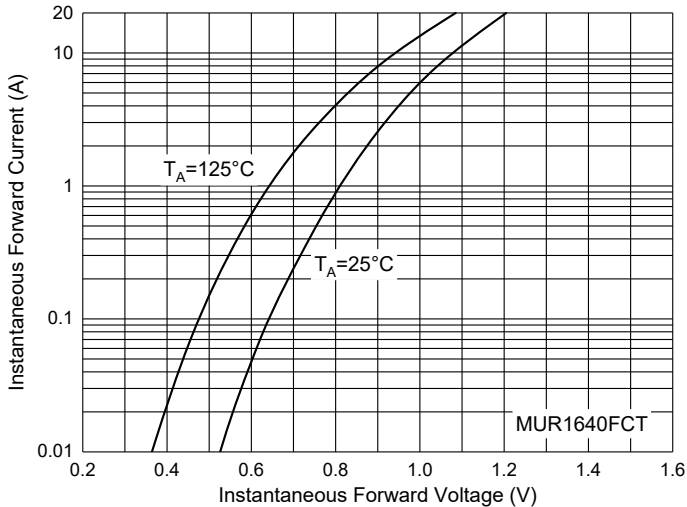
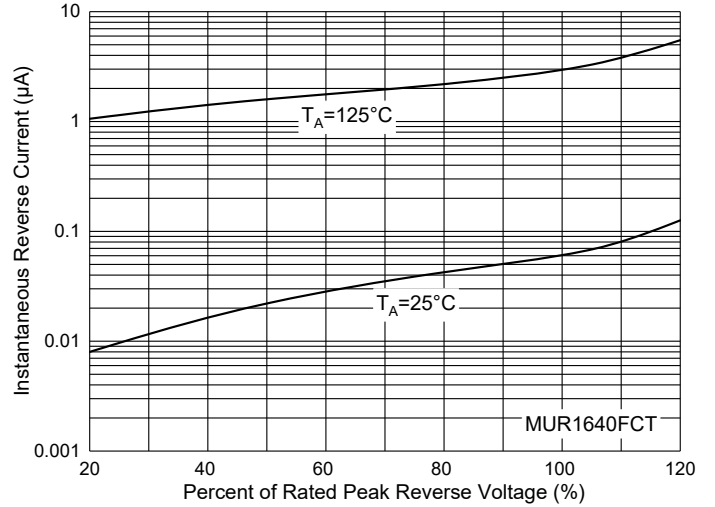


Fig. 6 - Typical Reverse Leakage Characteristics



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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