



**KERSEMI**

# MUR1605FCT THRU MUR1660FCT

## Features

- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- Super fast recovery times, high voltage
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

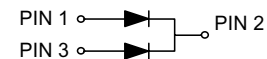
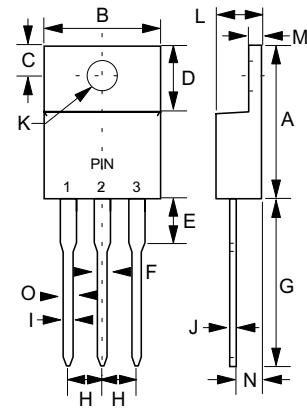
**16 Amp  
Super Fast  
Recovery Rectifier  
50 to 600 Volts**

## Maximum Ratings

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

MCC Catalog 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

## ITO-220AB



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	$T_C = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1605FCT-1620FCT 1630FCT-1640FCT 1660FCT	$V_F$	.95V 1.30V 1.70V	$T_J = 25^\circ\text{C}$ $I_{FM} = 8\text{A}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10uA 500uA	$T_a = 25^\circ\text{C}$ $T_a = 150^\circ\text{C}$
Maximum Reverse Recovery Time 1605FCT-1620FCT 1630FCT-1660FCT	$T_{rr}$	35ns 50ns	$I_F = 0.5\text{A}$ , $I_R = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$

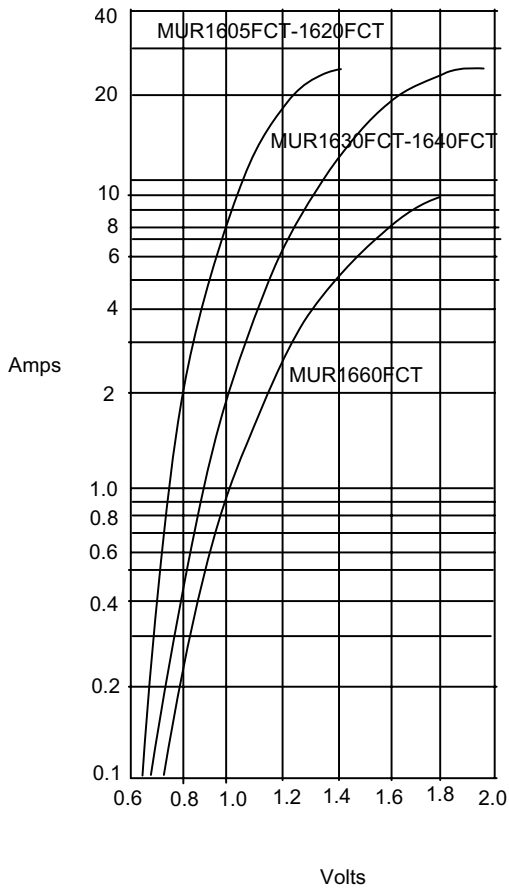
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.583	.606	14.80	15.40	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	.100		2.55		
I	---	.035	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	∅
L	---	.189	---	4.80	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



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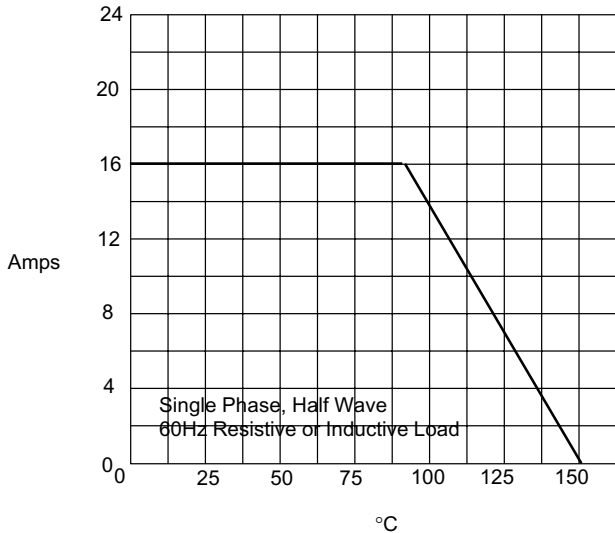
MUR1605FCT thru MUR1660FCT

Figure 1  
Typical Forward Characteristics



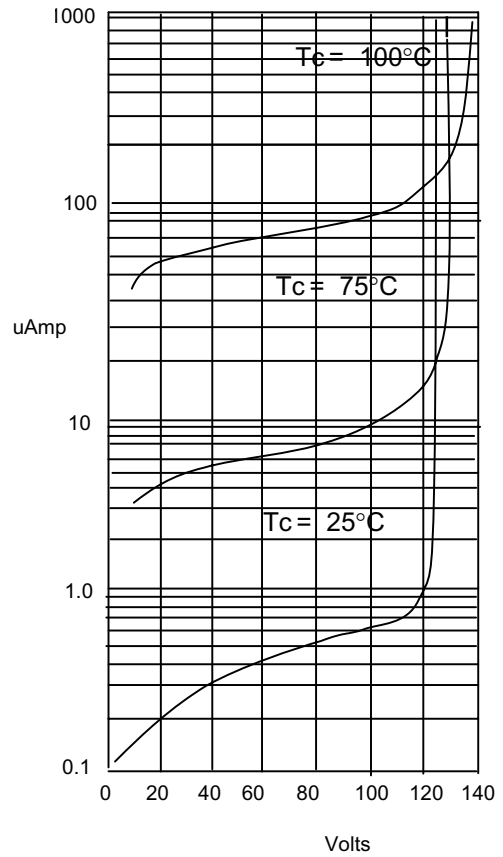
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 3  
Forward Derating Curve



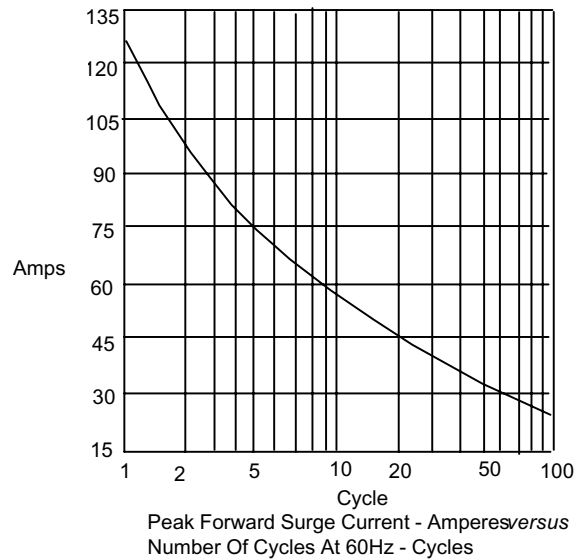
Average Forward Rectified Current - Amperes *versus*  
Case Temperature - °C

Figure 2  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 4  
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles