

Features

- Low power loss, high efficiency
- 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 (Note1) ("P" Suffix designates Compliant. See ordering information)
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1

Maximum Ratings

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

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

Electrical Characteristics @ 25°C Unless Otherwise Specified

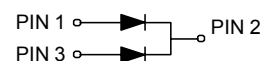
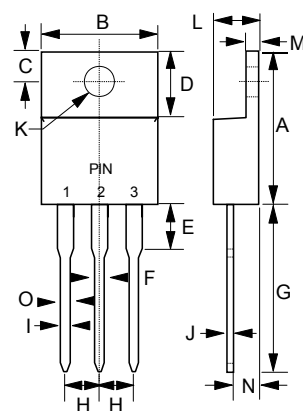
Average Forward Current	$I_{F(AV)}$	16A	$T_C = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1605FCT-1620FCT 1630FCT-1640FCT 1660FCT	V_F	.95V 1.30V 1.70V	$T_J = 25^\circ\text{C}$ $I_{FM} = 8\text{A};$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5μA 500μA	$T_a = 25^\circ\text{C}$ $T_a = 150^\circ\text{C}$
Maximum Reverse Recovery Time 1605FCT-1620FCT 1630FCT-1660FCT	T_{rr}	35ns 50ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

MUR1605FCT THRU MUR1660FCT

16 Amp Super Fast Recovery Rectifier 50 to 600 Volts

ITO-220AB



	INCHES		MM	
A	.567	.626	14.40	15.90
B	---	.421	---	10.70
C	.085	.128	2.15	3.25
D	.248	.272	6.30	6.90
E	---	.177	---	4.50
F	---	.071	---	1.80
G	.504	.559	12.70	14.20
H	---	.100	---	2.55
I	---	.035	---	0.90
J	---	.032	---	0.80
K	.102	.150	2.60	3.80
L	---	.201	---	5.10
M	---	.140	---	3.56
N	.083	.126	2.10	3.20
O	---	.055	---	1.40

MUR1605FCT thru MUR1660FCT

Figure 1
Typical Forward Characteristics

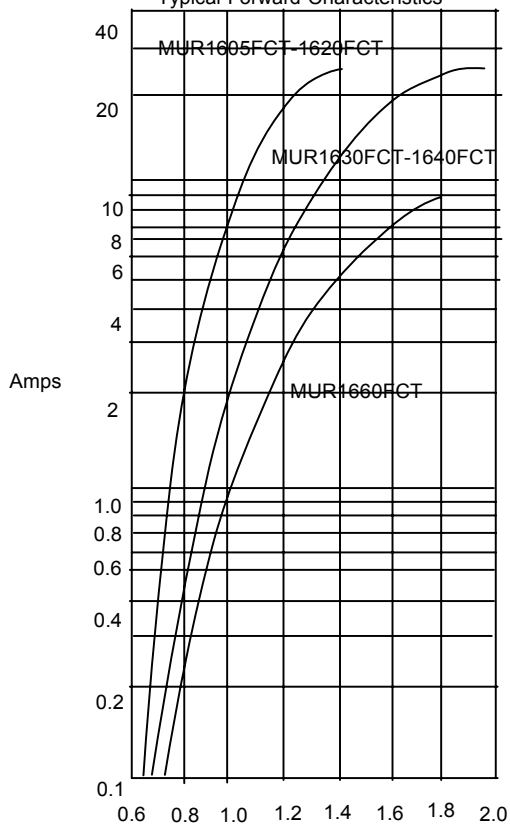
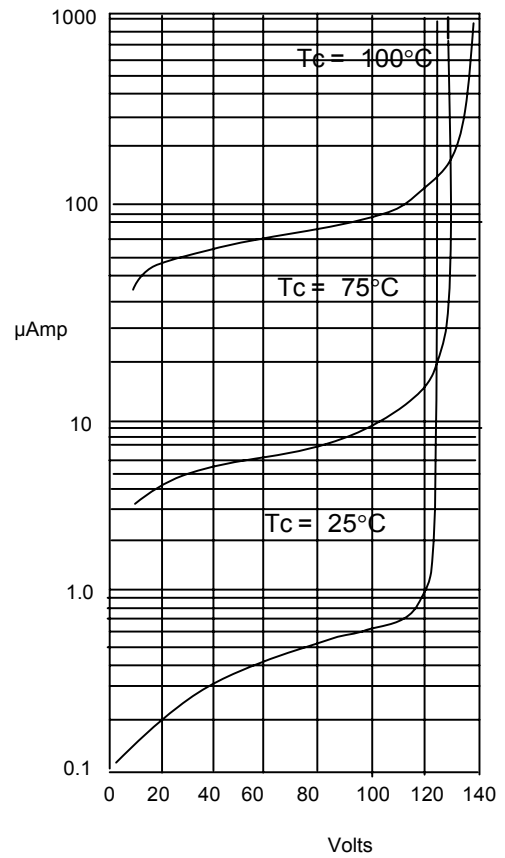
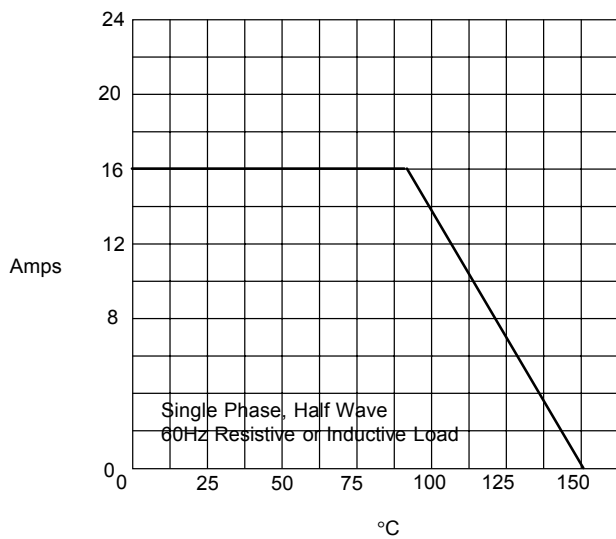


Figure 2
Typical Reverse Characteristics



Volts
Instantaneous Forward Current - Amperes
Instantaneous Forward Voltage - Volts

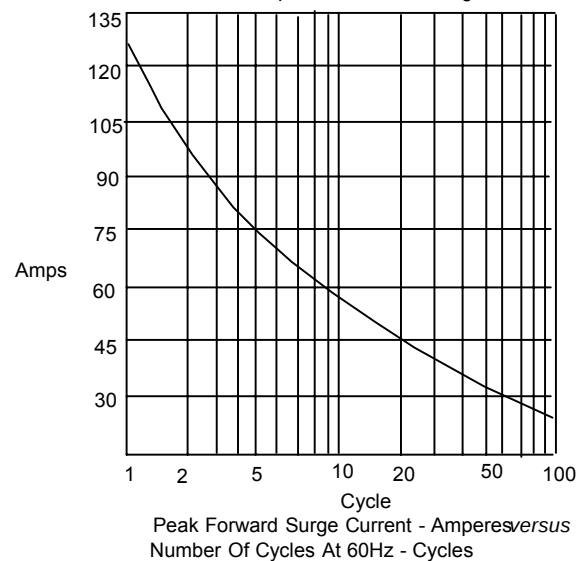
Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes
Case Temperature - °C

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

Figure 4
Maximum Non-Repetitive Forward Surge Current



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