

**Micro Commercial Components** 



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# MUR1605FCT **THRU** MUR1660FCT

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

# **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

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

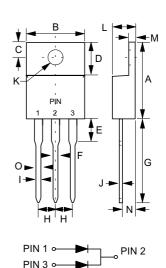
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1605FCT	MUR1605FCT	50V	35V	50V
MUR1610FCT	MUR1610FCT	100V	70V	100V
MUR1615FCT	MUR1615FCT	150V	105V	150V
MUR1620FCT	MUR1620FCT	200V	140V	200V
MUR1630FCT	MUR1630FCT	300V	210V	300V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

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	T <sub>C</sub> = 90°C
Peak Forward Surge Current	I <sub>FSM</sub>	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1605FCT-1620FCT 1630FCT-1640FCT 1660FCT	V <sub>F</sub>	.95V 1.30V 1.70V	T <sub>J</sub> = 25°C I <sub>FM</sub> = 8A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 500μΑ	T <sub>a</sub> = 25°C T <sub>a</sub> = 150°C
Maximum Reverse Recovery Time 1605FCT-1620FCT 1630FCT-1660FCT	Trr	35ns 50ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A

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

# **ITO-220AB**

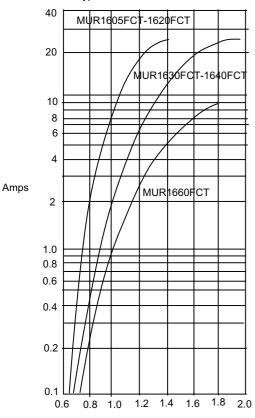


DIMENSIONS						
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.567	.626	14.40	15.90		
В		.421		10.70		
С	.085	.128	2.15	3.25		
D	.248	.272	6.30	6.90		
Е		.177		4.50		
F		.071		1.80		
G	.504	.559	12.70	14.20		
Н	.100		2.55			
- 1		.035		0.90		
J		.032		0.80		
K	.102	.150	2.60	3.80	Ø	
L		.201		5.10		
M		.140		3.56		
N	.083	.126	2.10	3.20		
0		.055		1.40		



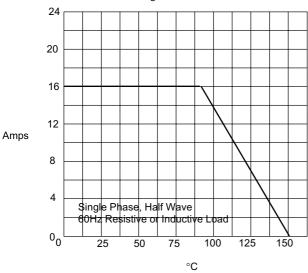
### MUR1605FCT thru MUR1660FCT

Figure 1
Typical Forward Characteristics



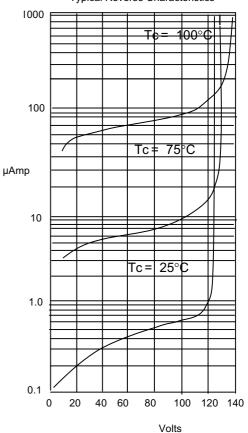
Volts
Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

Figure 3 Forward Derating Curve



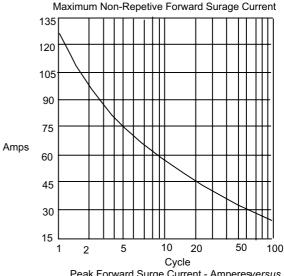
Averag<br/>Average Forward Rectified Current - Ampere $\mathbf{s}ersus$  Case Temperature<br/> -°C

Figure 2
Typical Reverse Characteristics



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

Figure 4
Maximum Non-Repetive Forward Surage Current



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



## **Ordering Information:**

Device	Packing
Part Number-BP	Bulk: 1Kpcs/Box

Note: Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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