

## 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
- High Frequency Operation
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# 16 Amp Ultra-Fast Recovery Rectifier Diodes 200 to 600 Volts

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical thermal resistance: 2.0°C/W Junction to Case

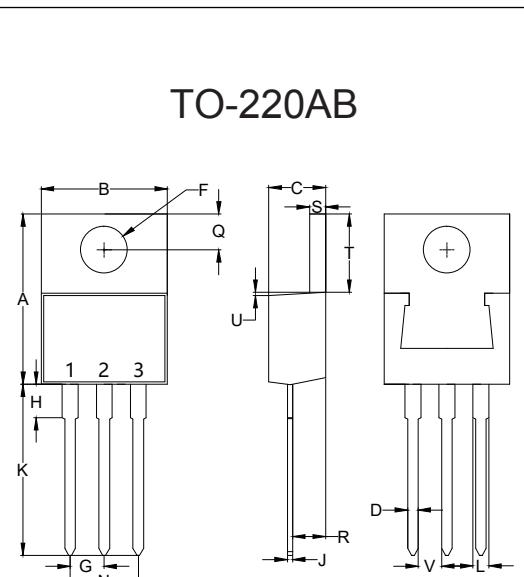
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS1620CT	MURS1620CT	200V	140V	200V
MURS1640CT	MURS1640CT	400V	280V	400V
MURS1660CT	MURS1660CT	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	$T_C=100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element			
MURS1620CT	$V_F$	1.0V	$I_F=8\text{A}; T_J=25^\circ\text{C}$
MURS1640CT		1.25V	$I_F=8\text{A}; T_J=25^\circ\text{C}$
MURS1660CT		1.6V	$I_F=8\text{A}; T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 100 $\mu\text{A}$	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time	$t_{rr}$	35ns	$I_F=0.5\text{A}; I_R=1.0\text{A};$ $I_{rr}=0.25\text{A}$

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

## Internal Structure



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.429	9.65	10.90	
C	0.140	0.201	3.56	5.10	
D	0.020	0.045	0.51	1.14	
E	0.131	0.170	3.34	4.31	Φ
G	0.079	0.121	2.01	3.07	
H	-----	0.250	-----	6.35	
J	0.011	0.025	0.28	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
M	0.158	0.242	4.02	6.14	
N	0.242	0.320	6.14	8.13	
O	0.135	0.200	3.43	5.10	
P	0.126	0.170	3.19	4.32	
Q	0.087	0.135	2.22	3.43	
R	0.050	0.126	1.27	3.20	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	0.050	0.070	1.27	1.80	
V	0.045	0.060	1.15	1.52	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

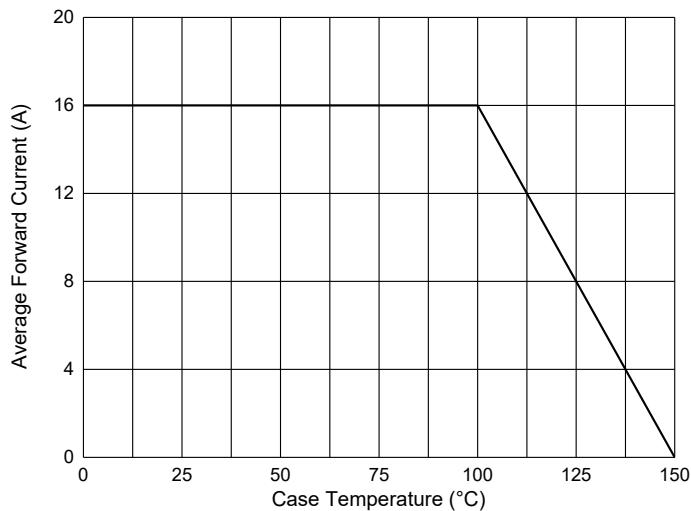


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

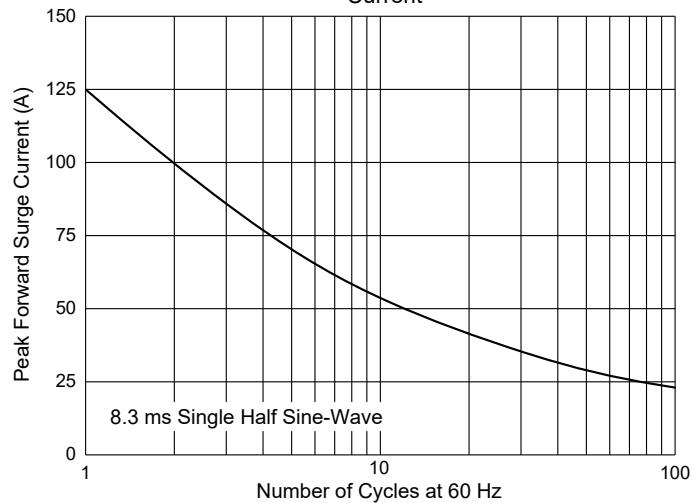


Fig. 3 - Forward Characteristics

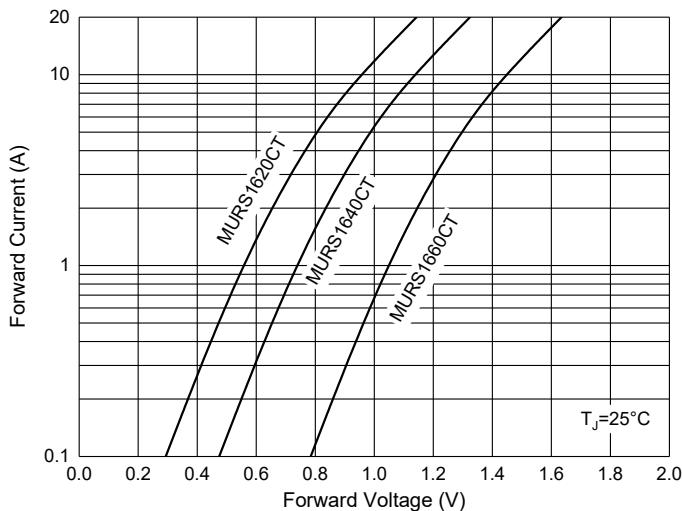
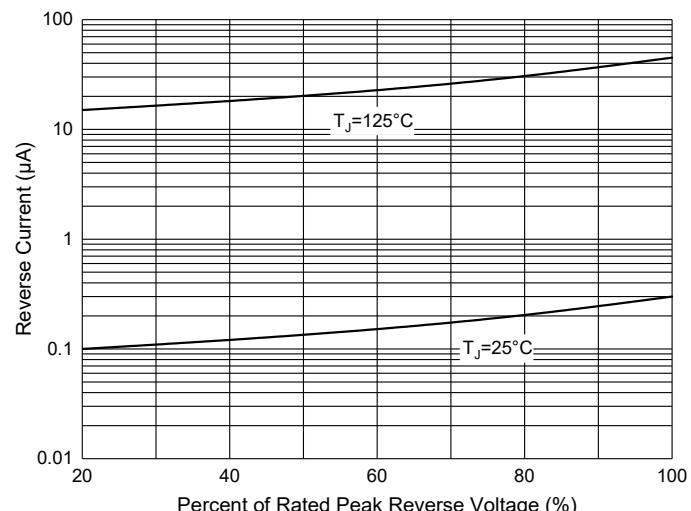


Fig. 4 - Reverse Characteristics



## 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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