

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Glass Passivated Chip
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"

## 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
MUR2010CT	MUR2010CT	100V	70V	100V
MUR2015CT	MUR2015CT	150V	105V	150V
MUR2020CT	MUR2020CT	200V	140V	200V
MUR2040CT	MUR2040CT	400V	280V	400V
MUR2060CT	MUR2060CT	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20A	$T_C=90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element MUR2010CT-2020CT MUR2040CT MUR2060CT	$V_F$	0.975V 1.3V 1.5V	$I_{FM}=10A$ ; $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu$ A 500 $\mu$ A	$T_A=25^\circ\text{C}$ ; $T_A=125^\circ\text{C}$
Maximum Reverse Recovery Time MUR2010CT-2020CT MUR2040CT-2060CT	$T_{RR}$	35ns 50ns	$I_F=0.5A$ ; $I_R=1.0A$ ; $I_{rr}=0.25A$
Typical Junction Capacitance	$C_J$	100pF	Measured at 1.0MHz, $V_R=4.0V$

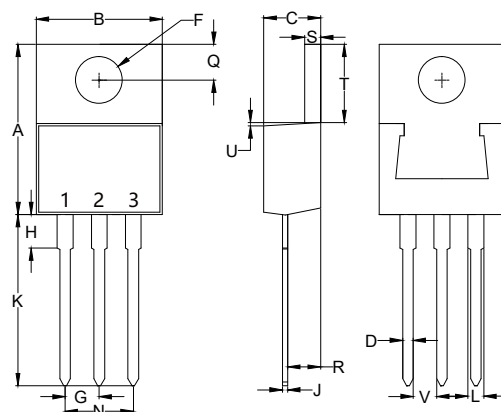
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

## Internal Structure



# 20 Amp Super Fast Glass Passivated Rectifier 100 to 600 Volts

## TO-220AB



## DIMENSIONS

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	
F	0.131	0.170	3.34	4.31	$\Phi$
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	
N	0.158	0.242	4.02	6.14	
Q	0.087	0.135	2.22	3.43	
R	0.080	0.126	2.04	3.19	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

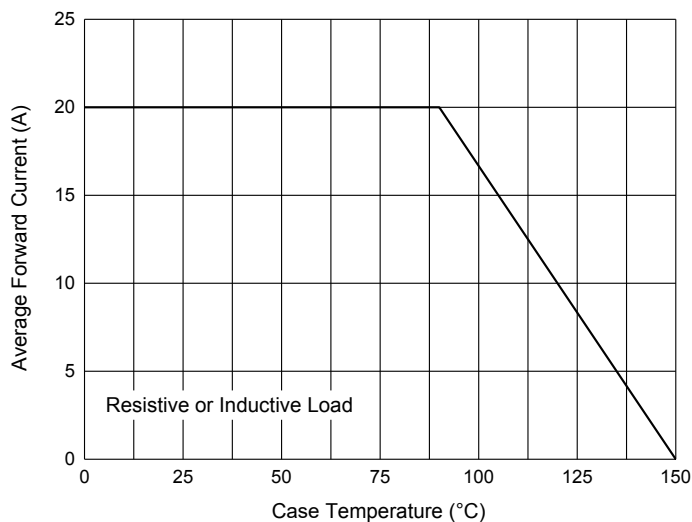


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

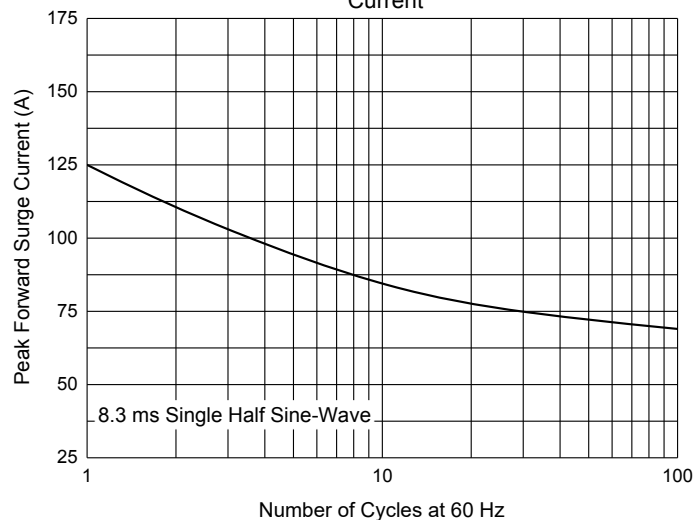


Fig. 3 - Typical Instantaneous Forward Characteristics

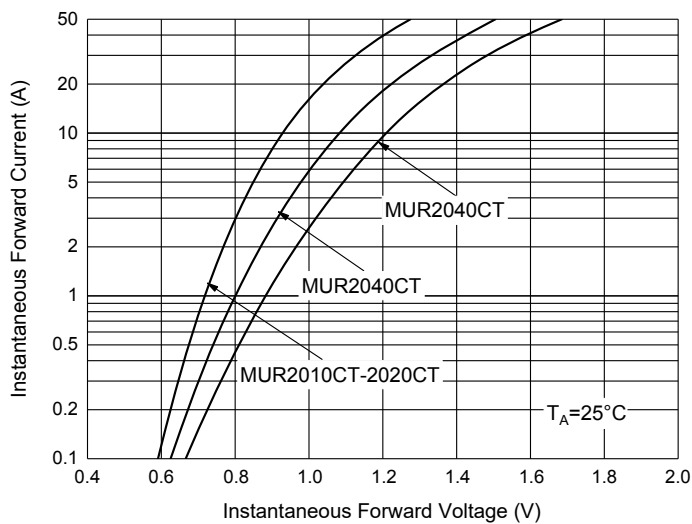
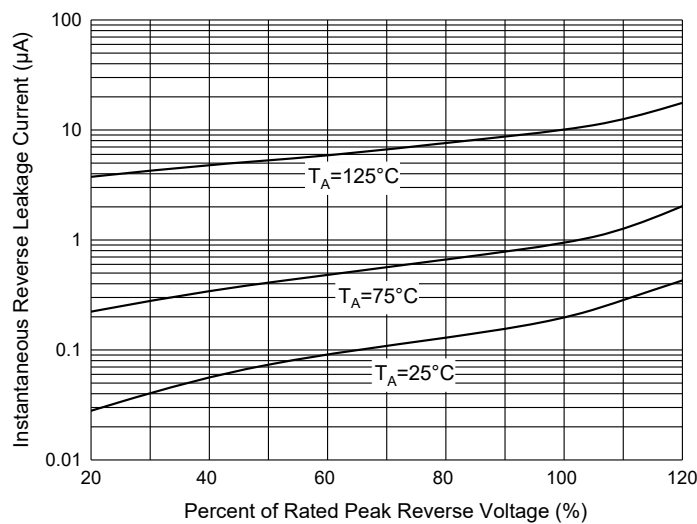


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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