

## **Features**

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

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2°C/W Junction to Case

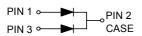
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MUR10100CT	MUR10100CT	1000V	700V	1000V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

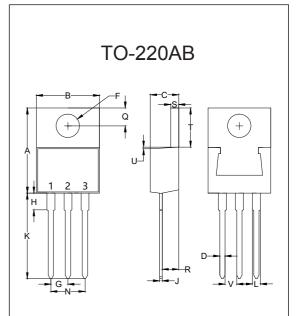
Average Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> =115°C
Peak Forward Surge Current	I <sub>FSM</sub>	125A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.7V	I <sub>F</sub> =5A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μA 300μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	75ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>REC</sub> =0.25A

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

# Internal Structure



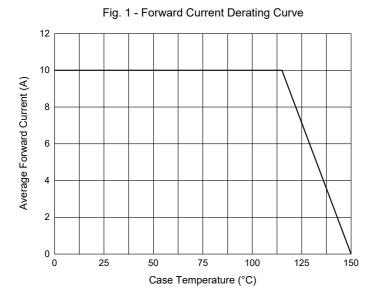
# 10 Amp Glass Passivated High Efficient Rectifiers 1000 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.560	0.625	14.22	15.88	
В	0.380	0.429	9.65	10.90	
С	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	Ф
G	0.079	0.121	2.01	3.07	
Н		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	
Т	0.230	0.270	5.84	6.86	
U		0.050		1.27	
V	0.045		1.15		



# **Curve Characteristics**



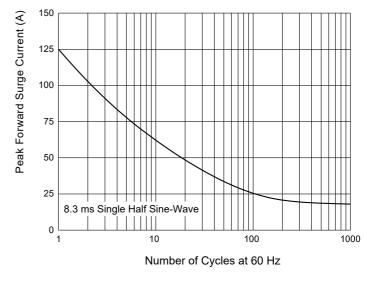
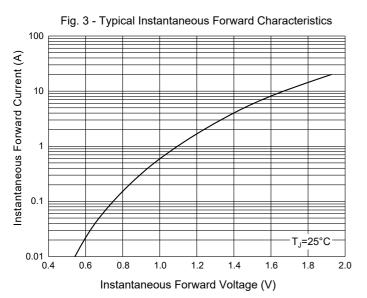
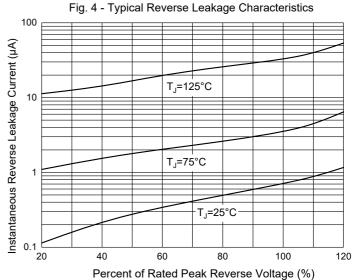


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current







## **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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