

## Power Schottky Rectifier - 10Amp 120Volt

**Features**

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency
- ESD performance human body mode > 6 KV
- Halogen-Free

**Application**

- AC/DC Switching Adaptor and other Switching Power Supply

**Absolute maximum ratings**

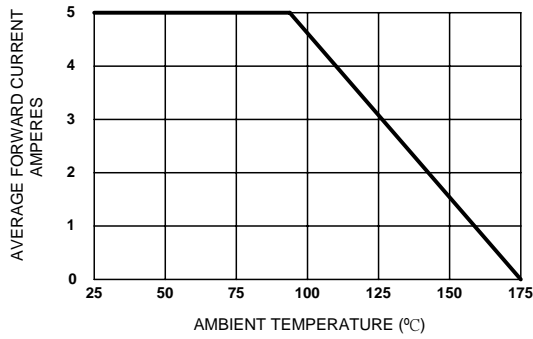
Symbol	Ratings	Unit	Conditions
I <sub>F(AV)</sub>	10	A	Average Forward Current
V <sub>RRM</sub>	120	V	Repetitive Peak Reverse Voltage
I <sub>FSM</sub>	120	A	Peak Forward Surge Current
V <sub>F</sub>	0.63	V	Forward Voltage Drop
T <sub>j</sub> , T <sub>stg</sub>	-50 to +175	°C	Operating and Storage Temperature

**Electrical characteristics**

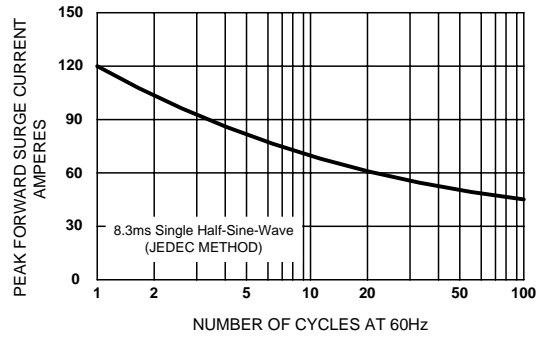
Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.79V	Per Leg at I <sub>F</sub> = 5A T <sub>c</sub> = 25°C
		0.63V	T <sub>c</sub> = 125°C
Maximum Reverse Leakage Current	I <sub>R</sub>	0.05mA	Per Leg at V <sub>R</sub> = 120V T <sub>c</sub> = 25°C
		10mA	T <sub>c</sub> = 125°C
Typical Thermal Resistance, Junction to Case	R <sub>θ(j-c)</sub>	2.2 °C/W	Per Leg TO-220AB
		4.5 °C/W	ITO-220AB

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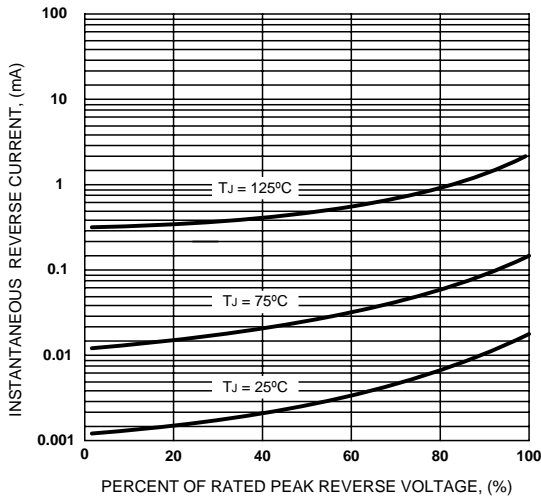
# MBR10U120CTH/FCTH



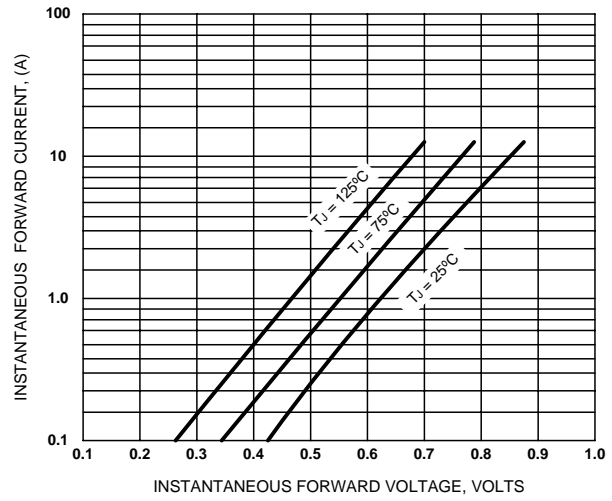
**Figure 1. Forward Current Derating Curve**



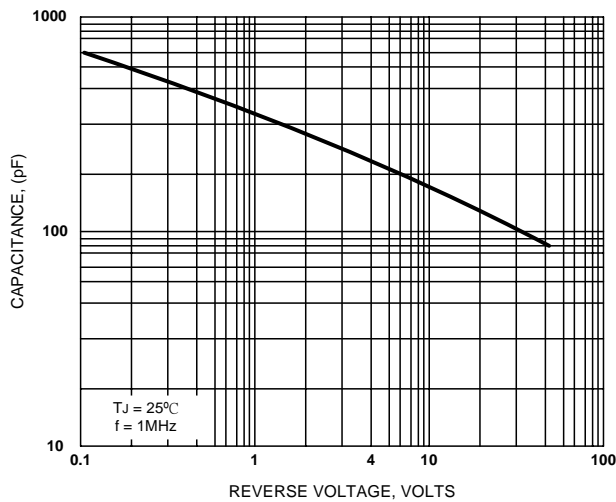
**Figure 2. Maximum Non-repetitive Surge Current**



**Figure 3. Typical Reverse Characteristics**



**Figure 4. Typical Forward Characteristics**



**Figure 5. Typical Junction Capacitance**

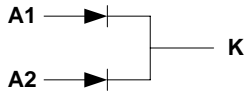
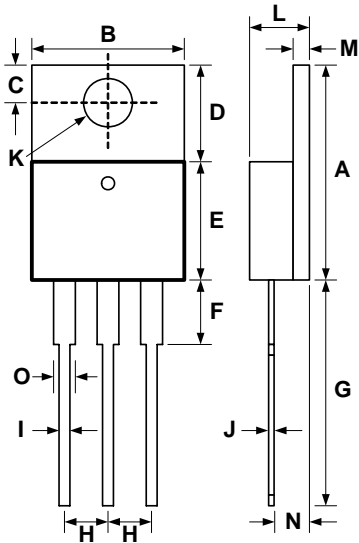


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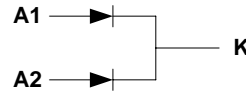
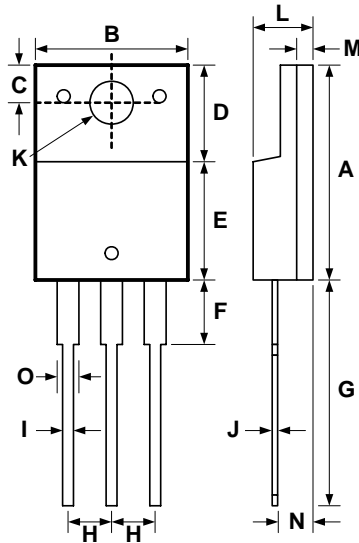
**T0-220AB**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.579	.606	14.70	15.40	
B	.392	.411	9.95	10.45	
C	.114	.126	2.90	3.20	
D	.248	.272	6.30	6.90	
E	.325	.350	8.25	8.90	
F	.153	.173	3.90	4.40	
G	.492	.551	12.50	14.00	
H	.096	.108	2.45	2.75	
I	.028	.039	0.70	1.00	
J	.010	.022	0.25	0.55	
K	.146	.157	3.70	4.00	
L	.167	.187	4.25	4.75	
M	.045	.057	1.15	1.45	
N	.089	.114	2.25	2.90	
O	.047	.055	1.20	1.40	

**MBR10U120FCTH**

**IT0-220AB**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.577	.600	14.65	15.25	
B	.386	.406	9.80	10.30	
C	.106	.122	2.70	3.10	
D	.258	.274	6.55	6.95	
E	.315	.331	8.00	8.40	
F	.110	.161	2.80	4.10	
G	.508	.551	12.90	14.00	
H	.089	.106	2.25	2.70	
I	.020	.028	0.50	0.70	
J	.020	.028	0.50	0.70	
K	.120	.138	3.05	3.50	
L	.169	.185	4.30	4.70	
M	.039	.051	1.00	1.30	
N	.079	.112	2.00	2.85	
O	.043	.055	1.10	1.40	