

**Features**

- Epoxy Meets UL 94 V-0 Flammability Rating
- Low Power Loss and High Efficiency
- High Surge Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"

**Maximum Ratings**

- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 4.5°C/W Junction to Case
- Typical Thermal Resistance : 4°C/W Junction to Case

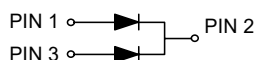
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2535FCT	MBR2535FCT	35V	24.5V	35V
MBR2545FCT	MBR2545FCT	45V	31.5V	45V
MBR2550FCT	MBR2550FCT	50V	35V	50V
MBR2560FCT	MBR2560FCT	60V	42V	60V

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

Average Forward Current	$I_{F(AV)}$	25A	$T_C=80^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage MBR2535FCT~2545FCT MBR2550FCT~2560FCT	$V_F$	0.65V 0.75V	$I_{FM}=12.5A; T_J=25^\circ\text{C}$ $I_{FM}=12.5A; T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.2mA	$T_J=25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	450pF	Measured at 1.0MHz, $V_R=4.0V$

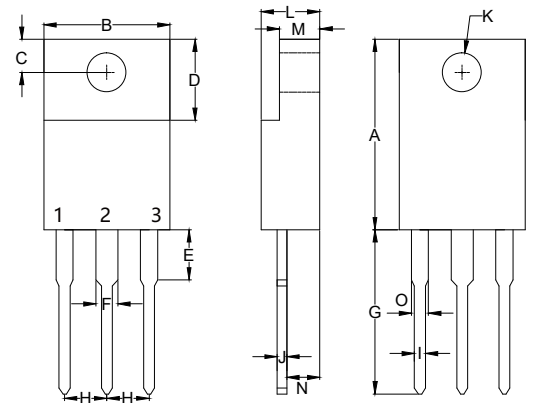
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

**Internal Structure**



**25 Amp  
Schottky  
Barrier Rectifier  
35 to 60 Volts**

**ITO-220AB**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.567	0.642	14.40	16.30	
B	-----	0.421	-----	10.70	
C	0.085	0.128	2.15	3.25	
D	0.248	0.272	6.30	6.90	
E	-----	0.177	-----	4.50	
F	-----	0.071	-----	1.80	
G	0.500	0.539	12.70	14.20	
H	0.100		2.55		
I	-----	0.035	-----	0.90	
J	-----	0.032	-----	0.80	
K	0.102	0.150	2.60	3.80	Φ
L	-----	0.201	-----	5.10	
M	-----	0.140	-----	3.56	
N	0.083	0.126	2.10	3.20	
O	-----	0.071	-----	1.80	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

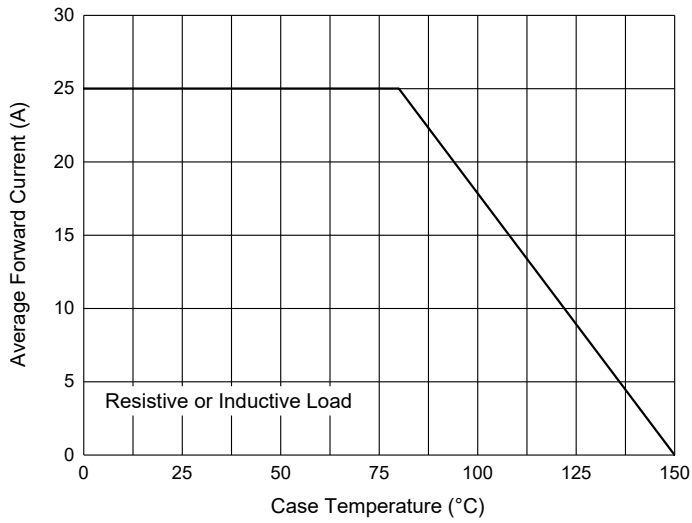


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

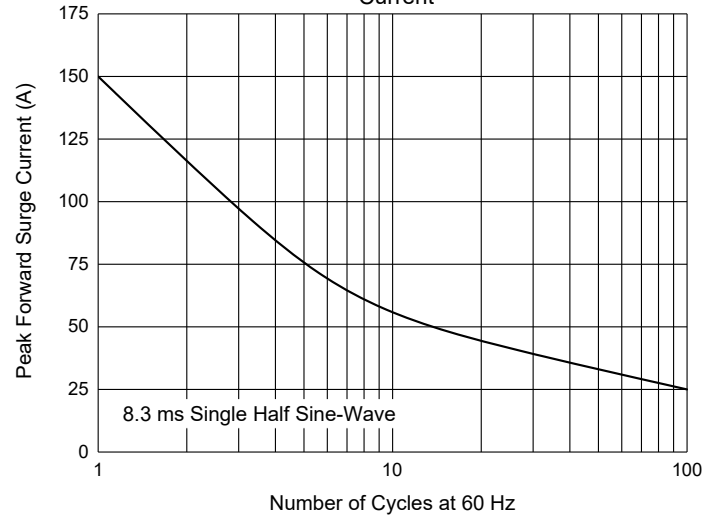


Fig. 3 - Typical Instantaneous Forward Characteristics

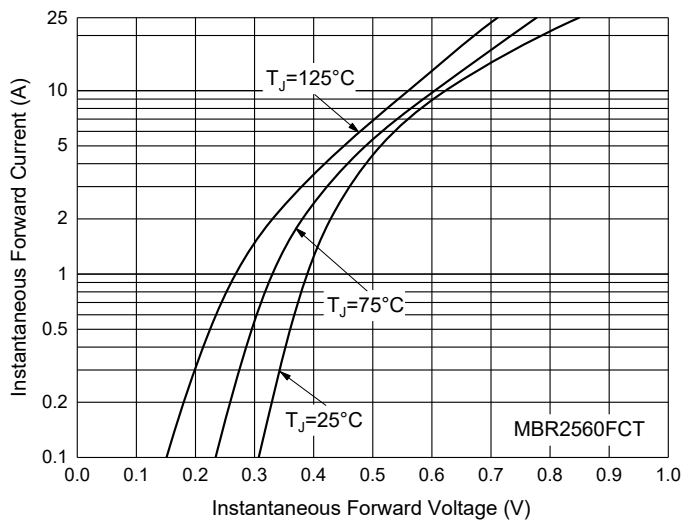
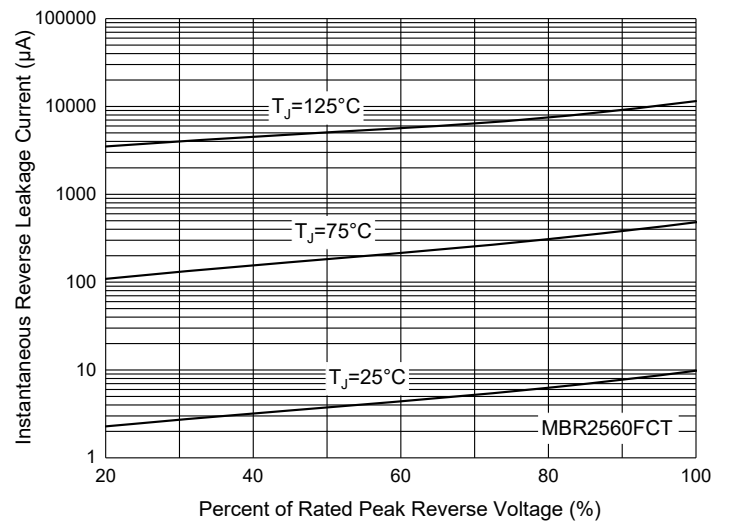


Fig. 4 - Typical Reverse Leakage Characteristics



## 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

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.