



Micro Commercial Components

Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# MBR2535FCT THRU MBR2560FCT

## Features

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- Marking : type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

## Maximum Ratings

- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 4.5°C/W junction to Case
- For capacitive load. Derate current by 20%

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

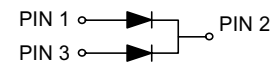
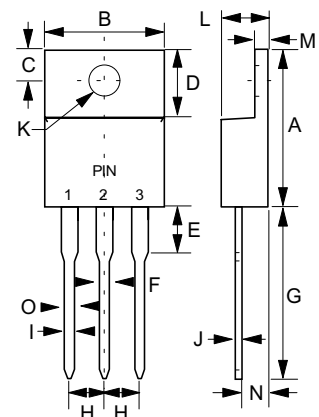
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Rectified Current	$I_{(AV)}$	30A	$T_A = 130^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	0.82V	$I_{FM} = 30A; T_C = 25^\circ\text{C}$
MBR2535FCT-2545FCT		0.75V	$I_F = 15A; T_C = 25^\circ\text{C}$
MBR2535FCT-2545FCT		0.73V	$I_{FM} = 30A; T_C = 125^\circ\text{C}$
MBR2550FCT-2560FCT		0.65V	$I_F = 15A; T_C = 125^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.2mA	$T_C = 25^\circ\text{C}$
MBR2535FCT-2545FCT		1.0mA	$T_C = 125^\circ\text{C}$
MBR2550FCT-2560FCT		40mA	
MBR2535FCT-2545FCT		50mA	
MBR2550FCT-2560FCT			
Typical Junction Capacitance	$C_J$	1000pF	Measured at 1.0MHz, $V_R = 4.0V$

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

## 30 Amp Schottky Barrier Rectifier 35 to 60 Volts

### ITO-220AB



#### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.583	.642	14.80	16.30	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	.100		2.55		
I	---	.035	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	∅
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	

# MBR2535FCT thru MBR2560FCT

## RATINGS AND CHARACTERISTIC CURVES (MBR2535FCT THRU MBR2560FCT)

FIG.1- FORWARD CURRENT DERATING CURVE

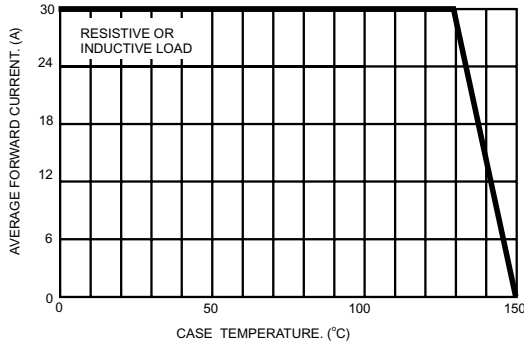


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

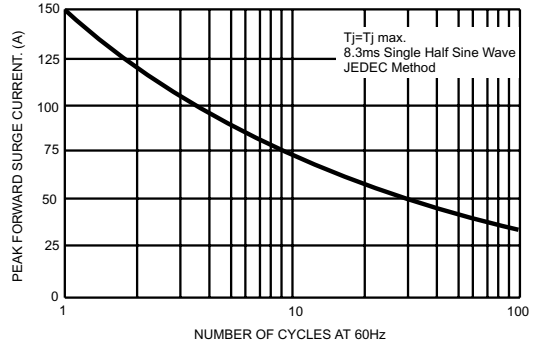


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

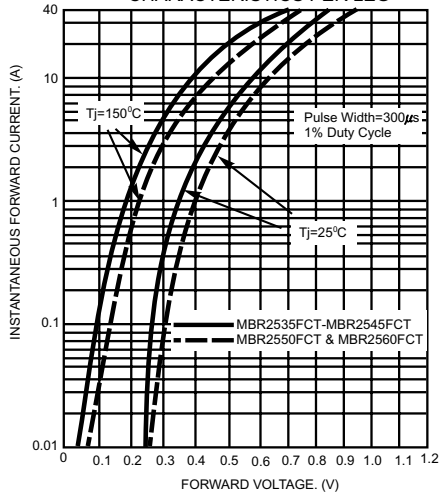


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

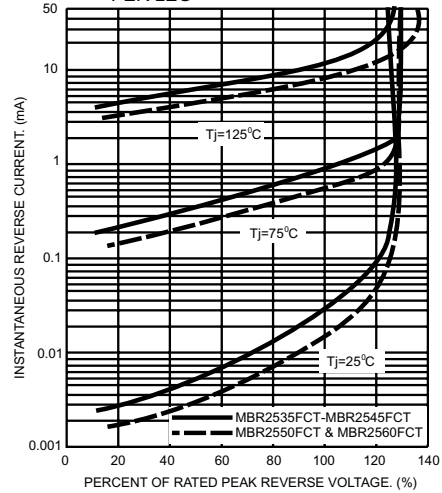


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

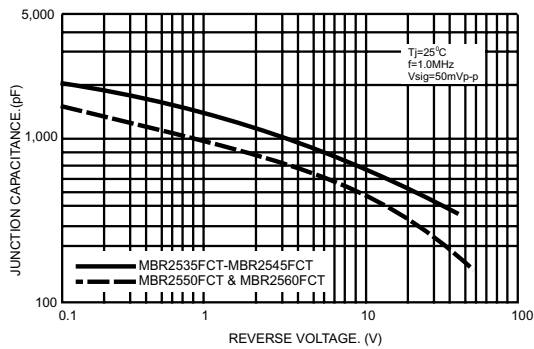
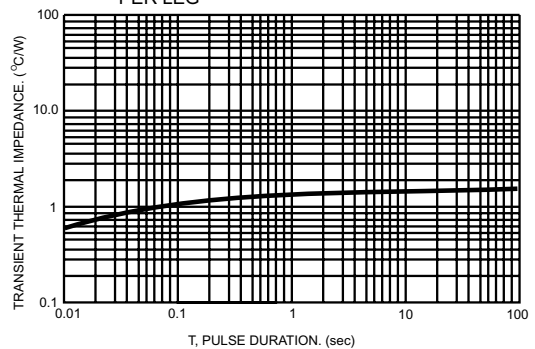


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG





Micro Commercial Components

## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

**\*\*\*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.

**\*\*\*APPLICATIONS DISCLAIMER\*\*\***

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.

---

[www.mccsemi.com](http://www.mccsemi.com)