

M·C·C·

Micro Commercial Components™



Micro Commercial Components
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MBR2535FCT
THRU
MBR2560FCT

Features

- Epoxy meets UL 94 V-0 flammability rating
- 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)
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix ".HF"

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

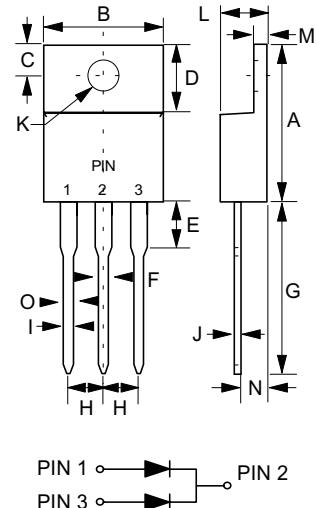
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Rectified Current	$I_{(AV)}$	30A	$T_A = 130^\circ C$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F		
MBR2535FCT-2545FCT	0.82V	$I_{FM} = 30A; T_c = 25^\circ C$	
MBR2550FCT-2560FCT	0.75V	$I_F = 15A, T_c = 25^\circ C$	
MBR2535FCT-2545FCT	0.73V	$I_{FM} = 30A; T_c = 125^\circ C$	
MBR2550FCT-2560FCT	0.65V	$I_F = 15A, T_c = 125^\circ C$	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R		
MBR2535FCT-2545FCT	0.2mA	$T_c = 25^\circ C$	
MBR2550FCT-2560FCT	1.0mA		
MBR2535FCT-2545FCT	40mA		
MBR2550FCT-2560FCT	50mA	$T_c = 125^\circ C$	
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	---	.90	
J	---	.032	---	.80	
K	.118	.134	3.00	3.40	Ø
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	

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MBR2535FCT thru MBR2560FCT

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RATINGS AND CHARACTERISTIC CURVES (MBR2535FCT THRU MBR2560FCT)

FIG.1- FORWARD CURRENT DERATING CURVE

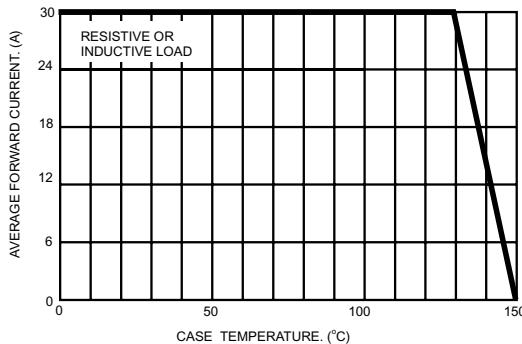


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

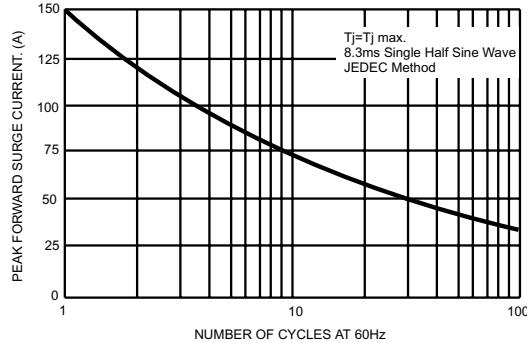


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

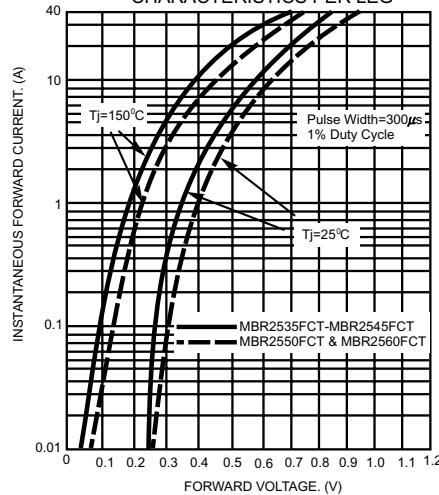


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

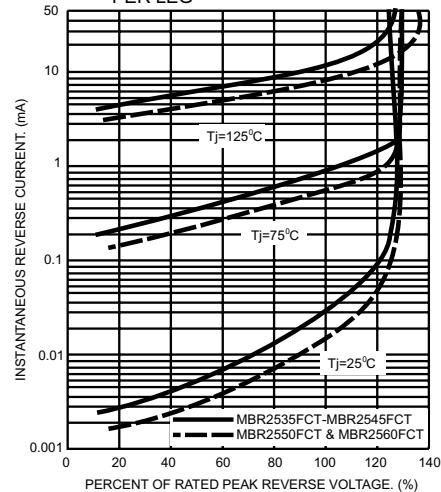


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

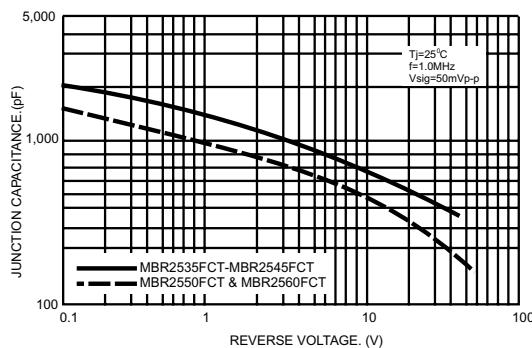
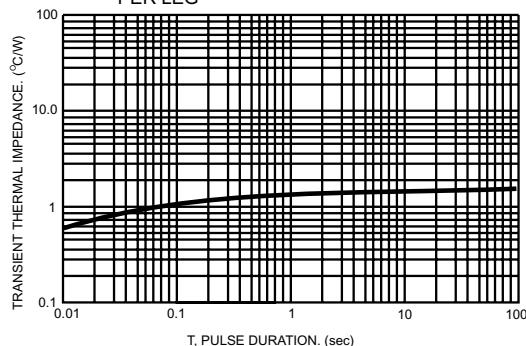


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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Ordering Information

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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