

Features

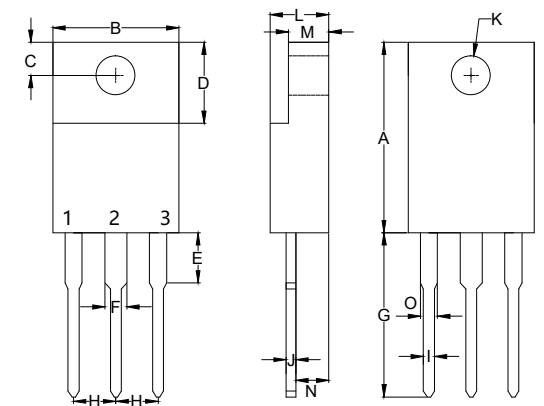
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Guard Ring For Transient Protection
- High Current Capability, High Efficiency

Maximum Ratings @ 25°C (Unless Otherwise Specified)

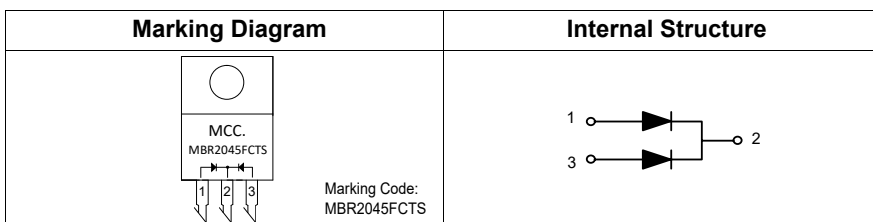
Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	45	V	
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
RMS Reverse Voltage	V_{RMS}	31.5	V	
Average Rectified Forward Current	$I_{F(AV)}$	Per Diode	10	A
		Per Device	20	
Non-Repetitive Peak Surge Current (Per Diode) @8.3ms Half Sine Wave	I_{FSM}	150	A	
Current Squared Time (Per Diode) @ 1ms≤t≤8.3ms	I^2t	93	A ² s	

**20 Amp
Schottky Barrier
Rectifier
45 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	



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

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-C)}$	Thermal Resistance from Junction to Case	Per Leg		4		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient	Without Heatsink, Free air		60		°C/W

Mechanical Data

Recommended Mounting Torque: 5in·lbs

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage Per Diode	V_F	$I_F=10A; T_J=25^\circ C$ $I_F=10A; T_J=125^\circ C$		0.59 0.54	0.65	V
Reverse Current Per Diode	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=125^\circ C$			0.1 50	mA
Junction Capacitance Per Diode	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		335		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

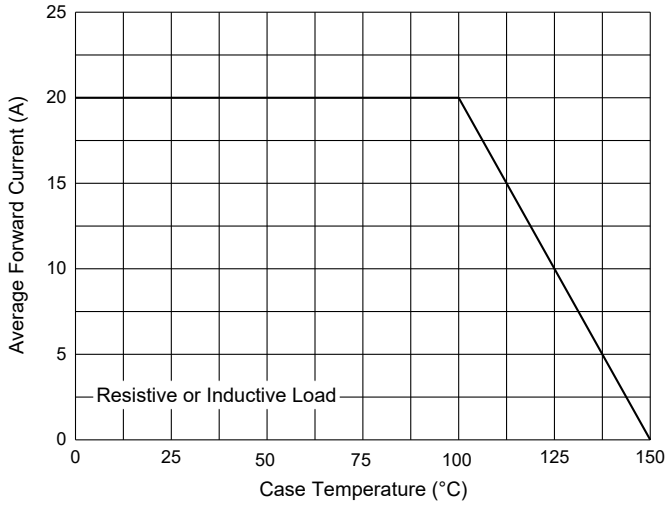


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

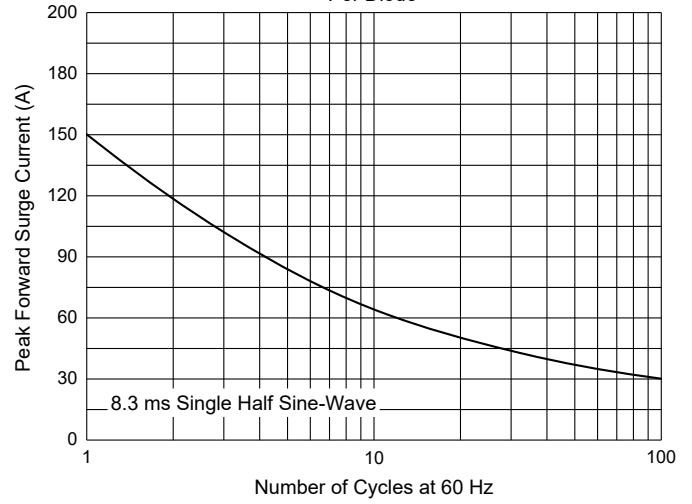


Fig. 3 - Typical Forward Characteristics Per Diode

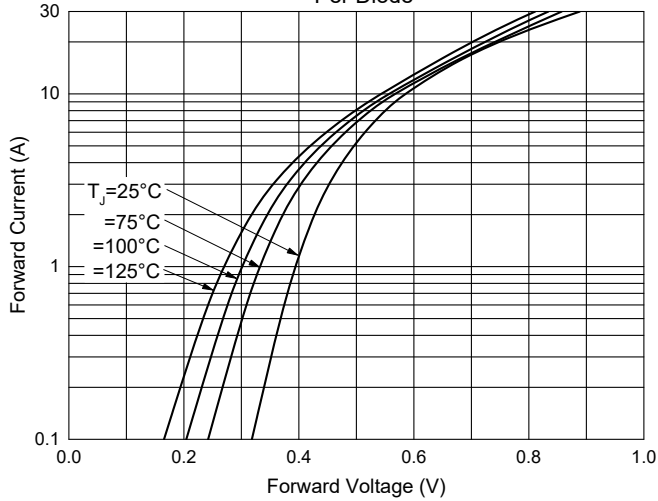


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode

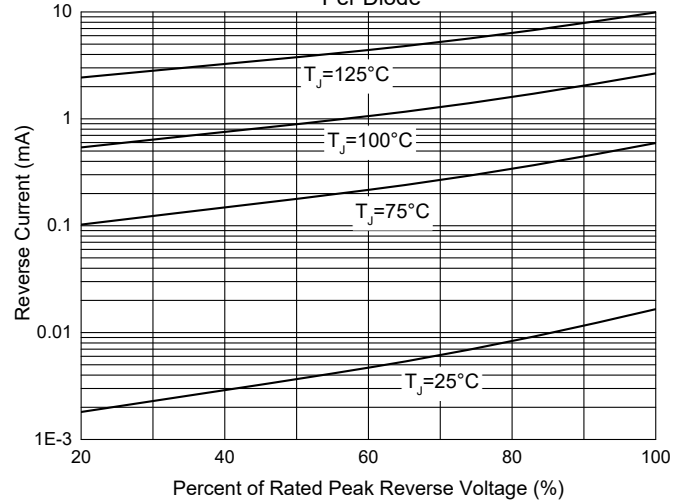
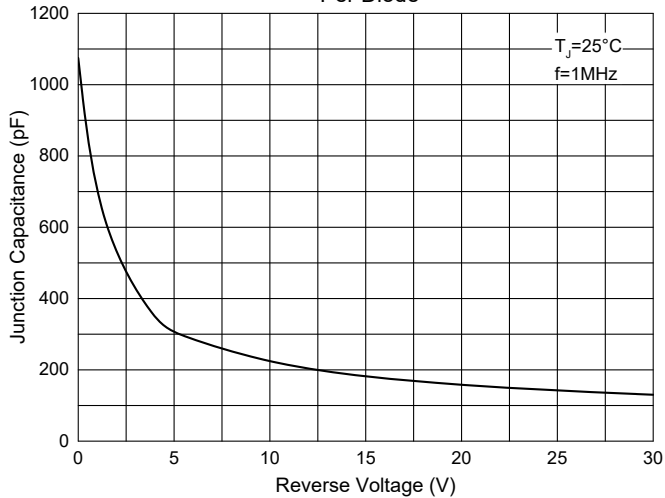


Fig. 5 - Typical Capacitance Characteristics Per Diode



Ordering Information

Device	Packing
MBR2045FCTS-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. MBR2045FCTS-BP-HF

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