



Micro Commercial Components



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MBRL2045FCT

Features

- High surge forward current capability
- Low Power loss, High efficiency
- Marking : type number
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

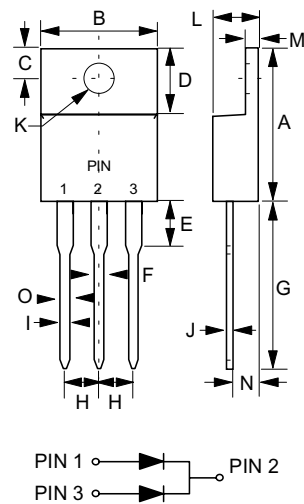
Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance Junction to Case : 2.0°C/W

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRL2045FCT	45V	31.5V	45V

20 Amp Low VF Schottky Barrier Rectifier 45 Volts

ITO-220AB



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	$T_C = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Current Squared Time	I^2t	94 A ² S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j = 25^\circ\text{C}$, Rating of per diode
Maximum Instantaneous Forward Voltage	V_F	.52V	$I_{FM} = 10\text{A}$; $T_A = 25^\circ\text{C}$
Peak Reverse Current	I_R	0.2mA 20mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

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

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.583	.606	14.80	15.40	
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	

Characteristics(Typical)

FIG1:Forward Current Derating Curve

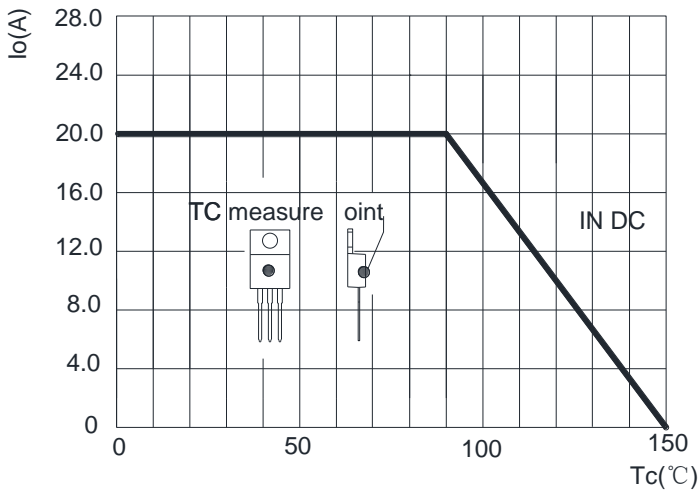


FIG2:Surge Forward Current Capacity

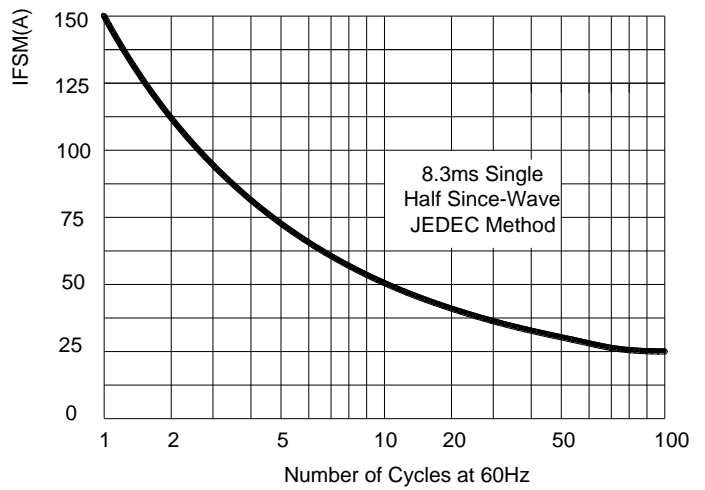


FIG3:Instantaneous Forward Voltage

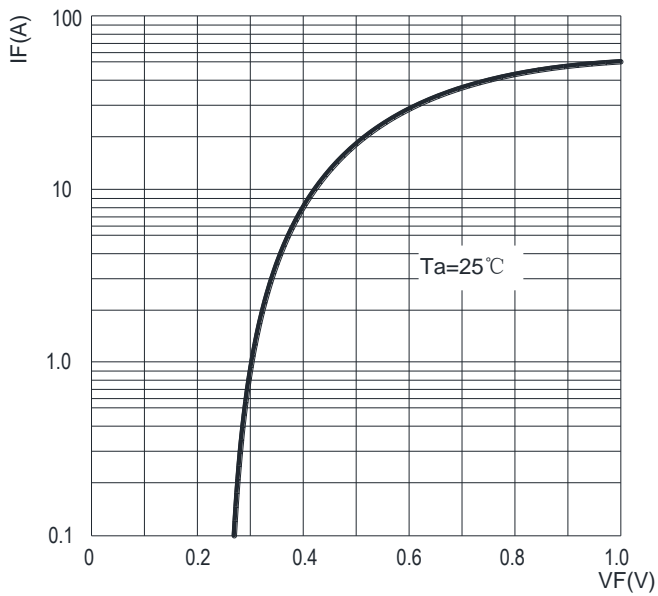
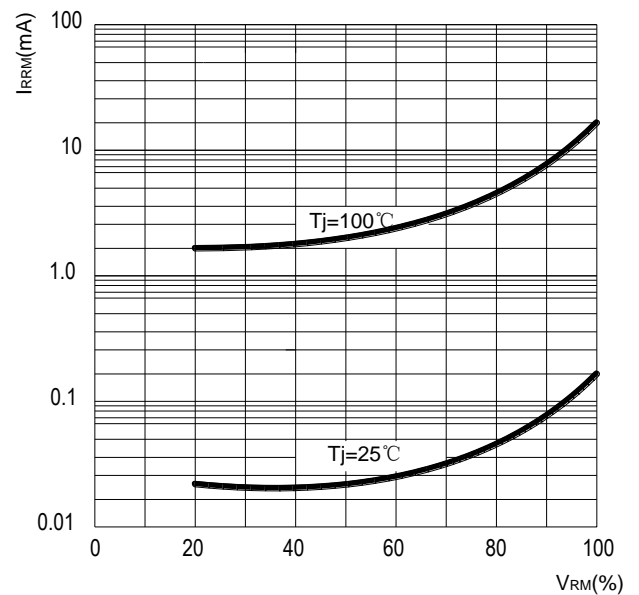


FIG4:Typical Reverse Characteristics





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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