



Micro Commercial Components



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

MBRL2045CT

**20 Amp Low VF
 Schottky
 Barrier Rectifier
 45 Volts**

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

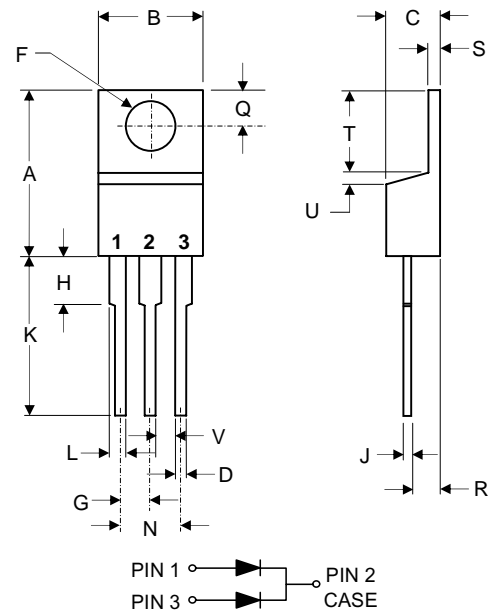
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRL2045CT	45V	31.5V	45V

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	1ms ≤ t < 8.3ms T _j =25°C, Rating of per diode
Maximum Instantaneous Forward Voltage	V_F	.52V	$I_{FM} = 10A;$ $T_A = 25^\circ\text{C}$
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.

TO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.429	9.65	10.90	
C	.140	.200	3.56	5.10	
D	.020	.045	0.51	1.14	
F	.131	.170	3.34	4.31	∅
G	.079	.121	2.01	3.07	
H	---	.250	---	6.35	
J	.011	.025	0.28	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.158	.242	4.02	6.14	
Q	.087	.135	2.22	3.43	
R	.080	.126	2.04	3.19	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	

■ Characteristics(Typical)

FIG1:Forward Current Derating Curve

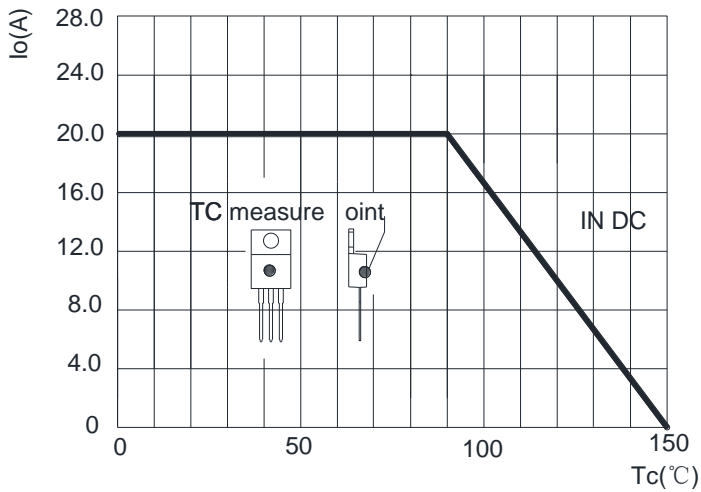


FIG2:Surge Forward Current Capacity

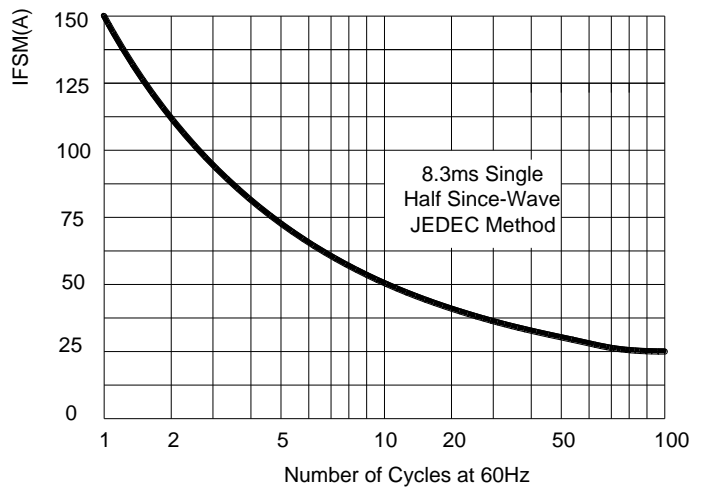


FIG3:Instantaneous Forward Voltage

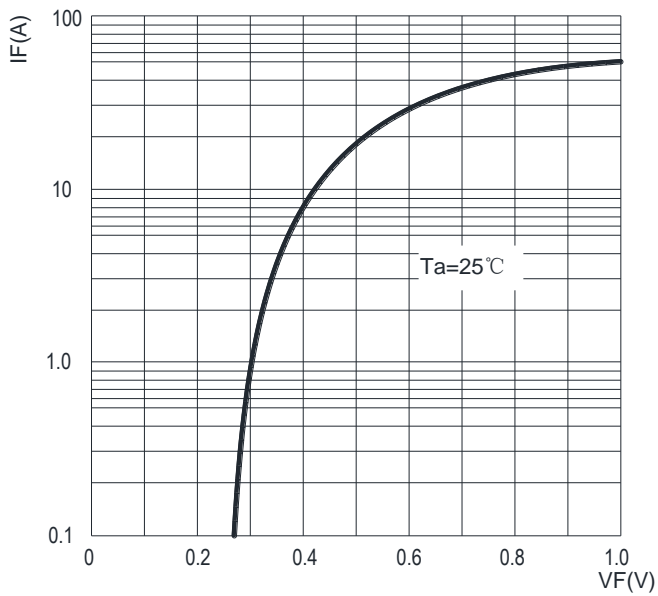
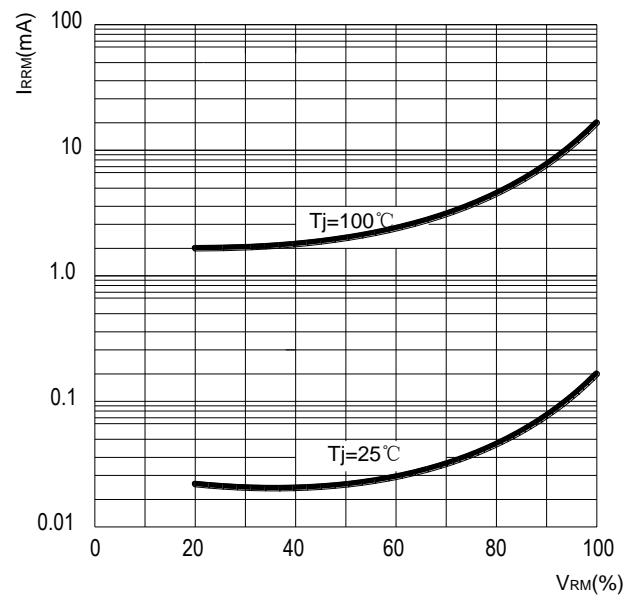


FIG4:Typical Reverse Characteristics





Ordering Information

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

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

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.

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.