



Micro Commercial Components



Micro Commercial Components  
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# MBRL20100CT

## 20 Amp Low VF Schottky Barrier Rectifier 100 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

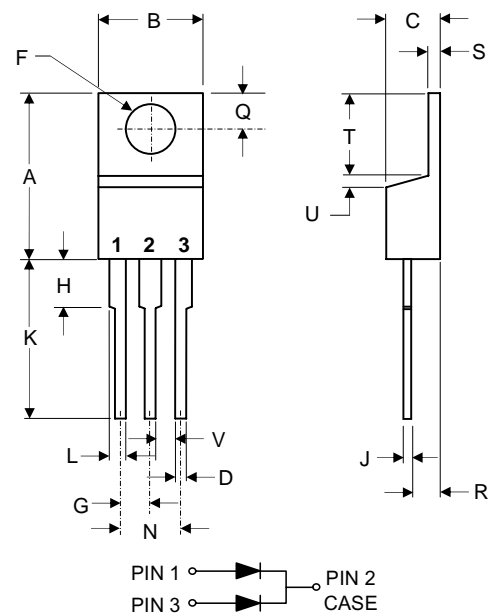
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRL20100CT	100V	70V	100V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	200A	8.3ms, half sine
Current Squared Time	$I^2t$	167A <sup>2</sup> S	1ms ≤ t < 8.3ms $T_j = 25^\circ\text{C}$ , Rating of per diode
Maximum Instantaneous Forward Voltage	$V_F$	.70V	$I_{FM} = 10\text{A};$ $T_A = 25^\circ\text{C}$
Peak Reverse Current	$I_R$	0.1mA 10mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

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

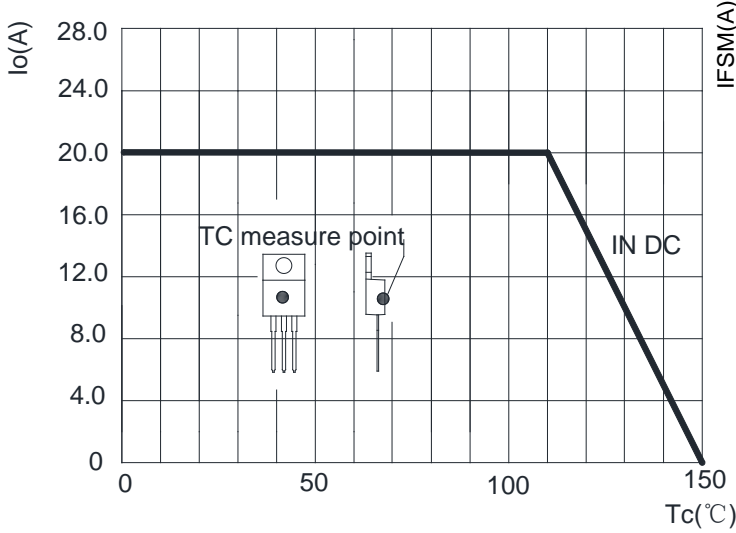


FIG2:Surge Forward Current Capacity

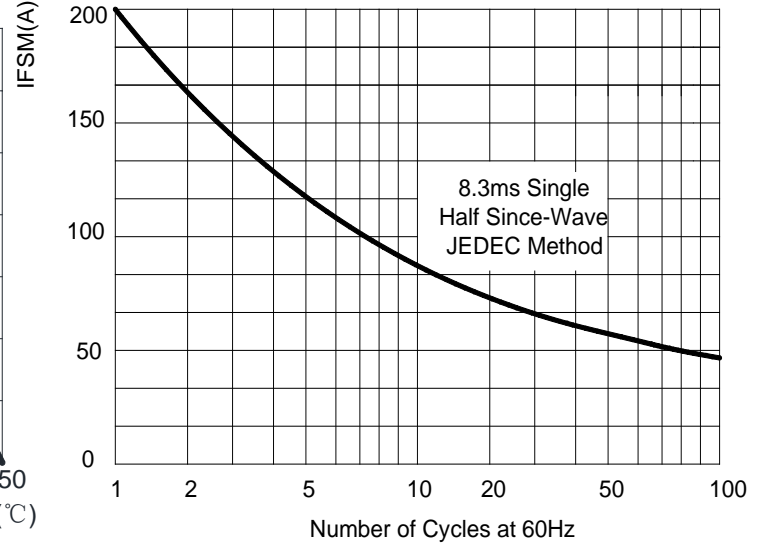


FIG3:Instantaneous Forward Voltage

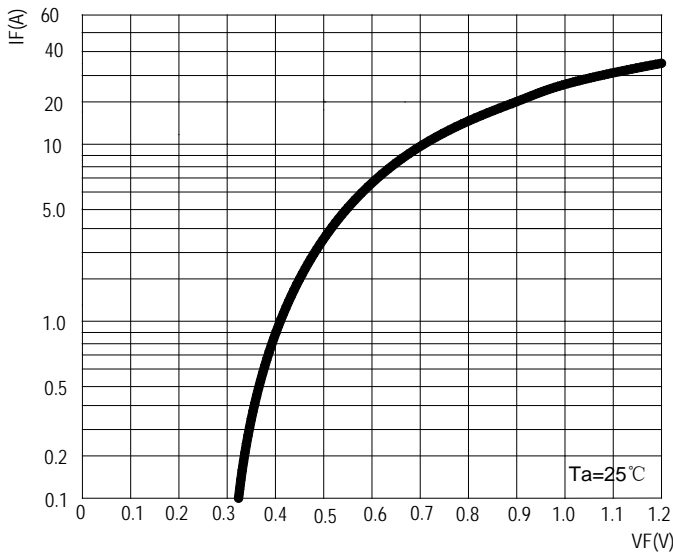
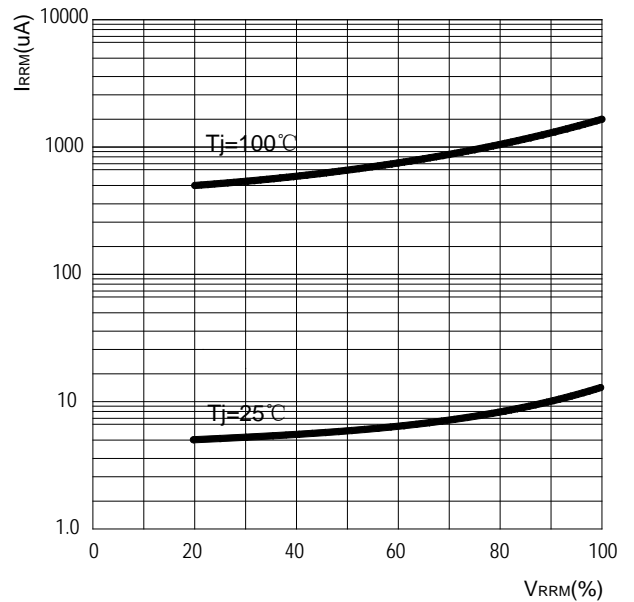


FIG4:Typical Reverse Characteristics





## Ordering Information

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

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

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