



Micro Commercial Components
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MBR16100CT

16 Amp Schottky Barrier Rectifier 100 Volts

Features

- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

- Operating Temperature :-50°C to +150°C
- Storage Temperature: - 50°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR16100CT	MBR16100CT	100 V	70V	100 V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	125A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	.85V .75V	$I_{FM} = 8A$ $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	0.1mA 100mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	275pF	Measured at 1.0MHz, $V_R=4.0V$

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

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DIMENSIONS

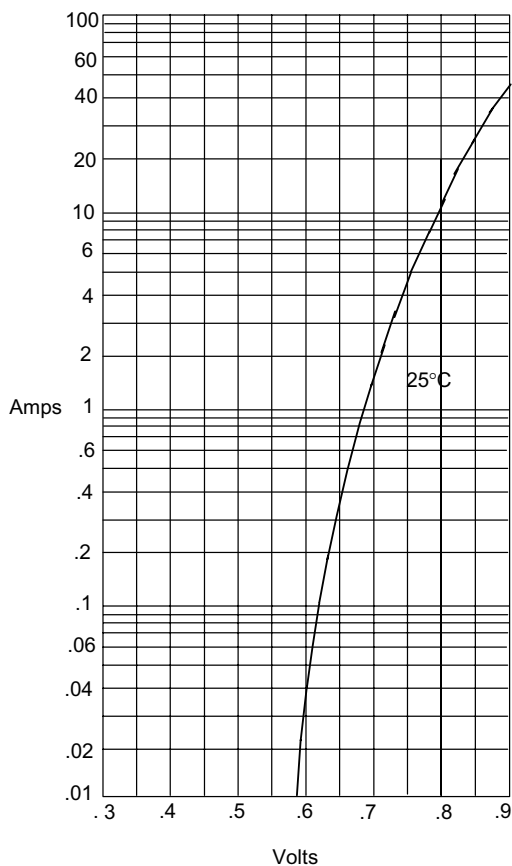
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	



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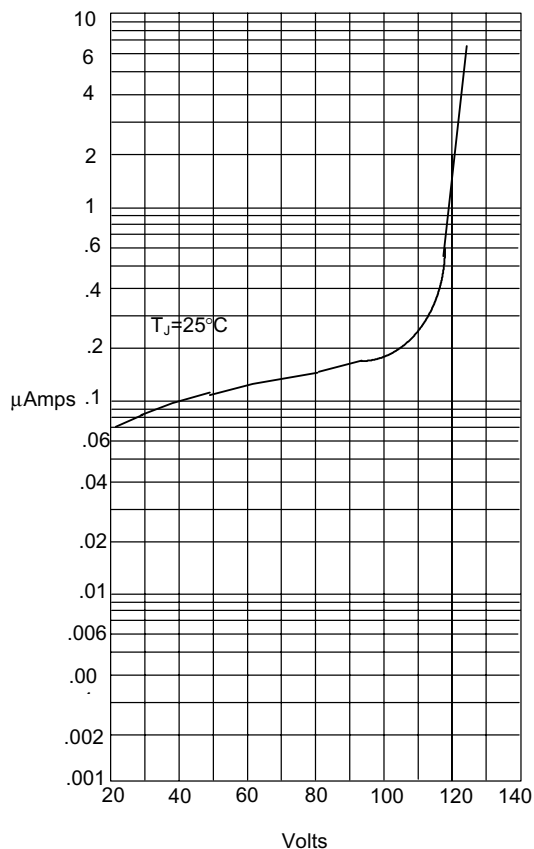
MBR16100CT

Figure 1
Typical Forward Characteristics



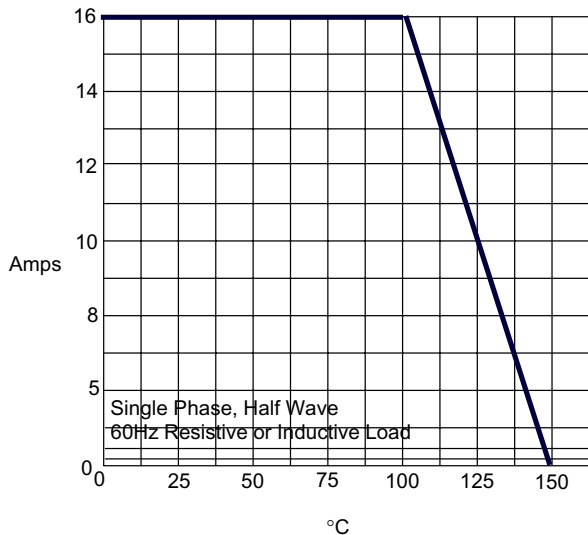
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



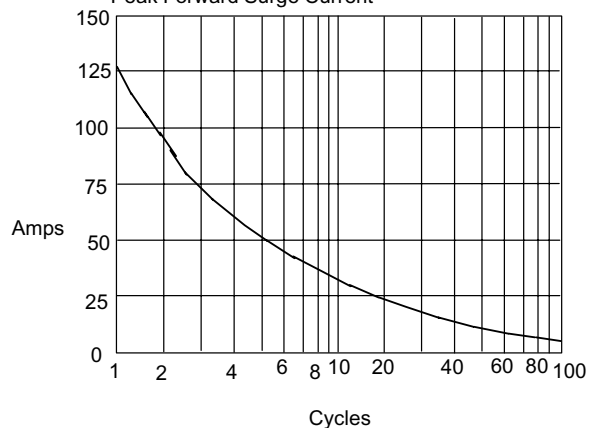
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles