Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MBR1620CT THRU MBR1660CT

16 Amp Schottky Barrier Rectifier 20 to 60 Volts

Features

- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C

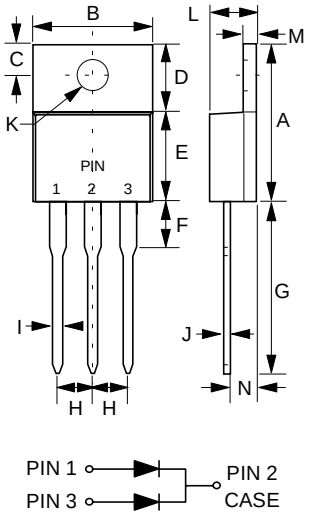
Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1620CT	MBR1620CT	20V	14V	20V
MBR1630CT	MBR1630CT	30V	21V	30V
MBR1635CT	MBR1635CT	35V	24.5V	35V
MBR1640CT	MBR1640CT	40V	28V	40V
MBR1645CT	MBR1645CT	45V	31.5V	45V
MBR1660CT	MBR1660CT	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	T_C = 100°C
Peak Forward Surge Current	I_{FSM}	125A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element 1620CT-1645CT 1660CT 1620CT-1645CT 1660CT	V_F	.70V .80V .57V .70V	I_{FM} = 8A T_J = 25°C T_J = 125°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	0.1mA 50mA	T_J = 25°C T_J = 100°C
Typical Junction Capacitance 1620CT-1645CT 1660CT	C_J	300pF 400pF	Measured at 1.0MHz, V_R=4.0V

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

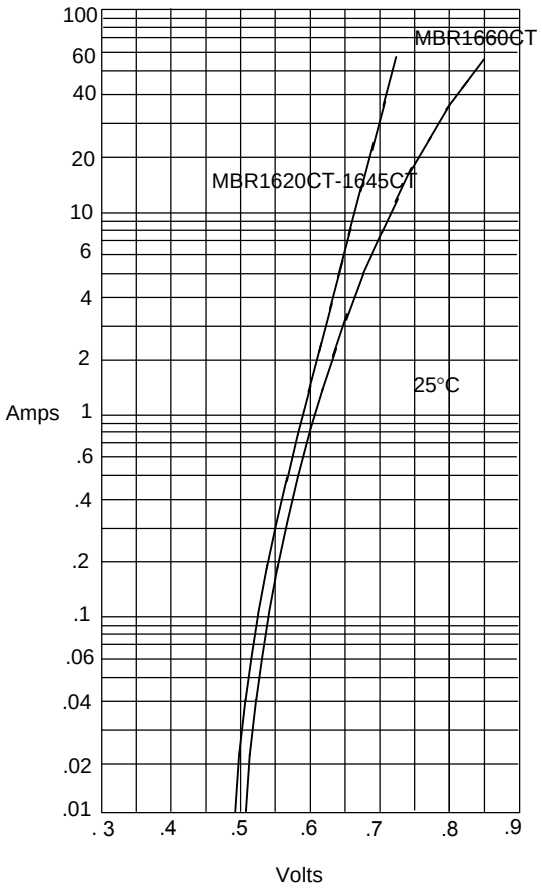
TO-220AB



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	------	.250	------	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

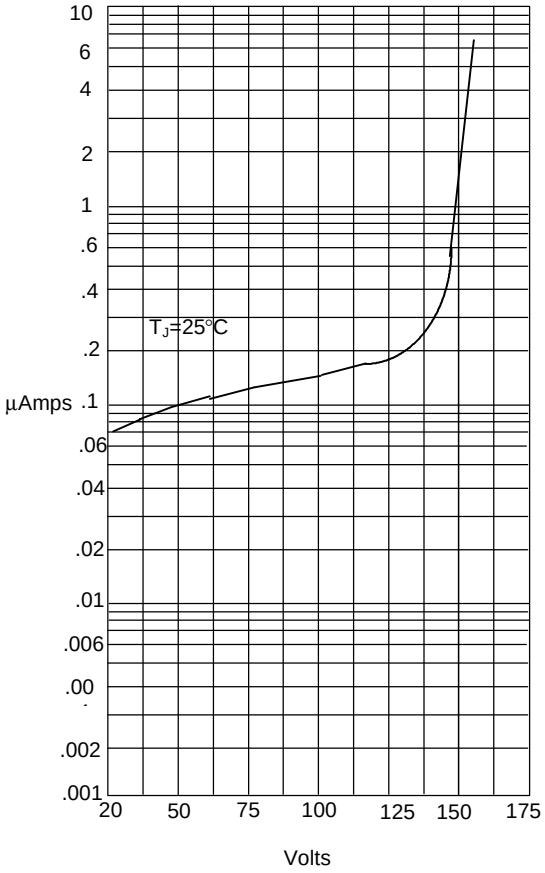
MBR1620CT thru MBR1660CT

Figure 1
Typical Forward Characteristics



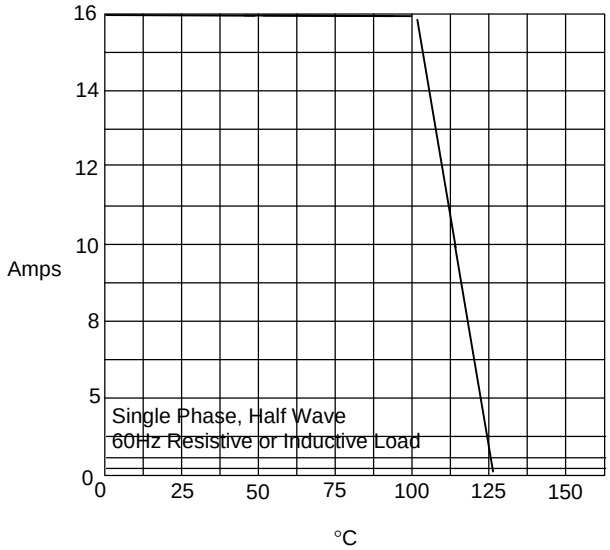
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



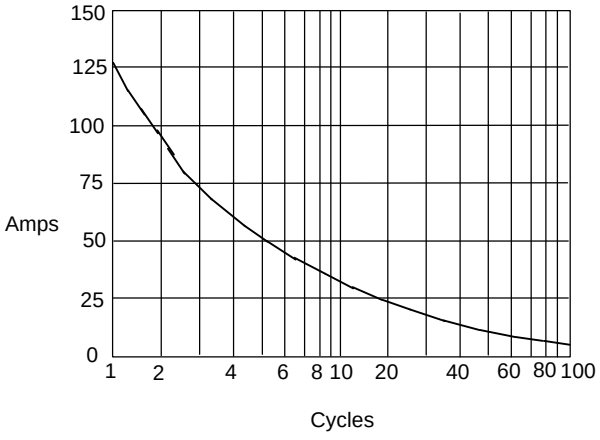
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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