Micro Commercial Components

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MBRB1620CT THRU MBRB1660CT

16 Amp Schottky Barrier Rectifier 20 to 60 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Metal of Silicon Rectifier, Majority Conducton
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Low Power Loss
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Reccurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB1620CT	20V	14V	20V
MBRB1630CT	30V	21V	30V
MBRB1635CT	35V	24.5V	35V
MBRB1640CT	40V	28V	40V
MBRB1645CT	45V	31.5V	45V
MBRB1660CT	60V	42V	60V

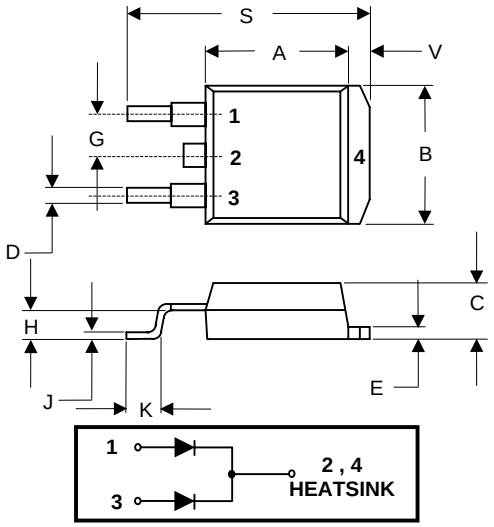
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	T_C = 90°C
Peak Forward Surge Current	I_{FSM}	150A	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	Measured at 1.0MHz, V_R=4.0V

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

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

D²-PACK



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	.320	.359	8.13	9.14	
B	.380	.411	9.65	10.45	
C	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
H	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14	1.40	

SUGGESTED SOLDER PAD LAYOUT

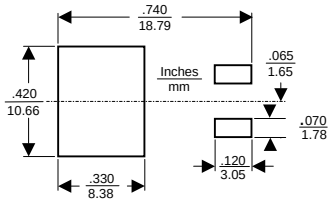
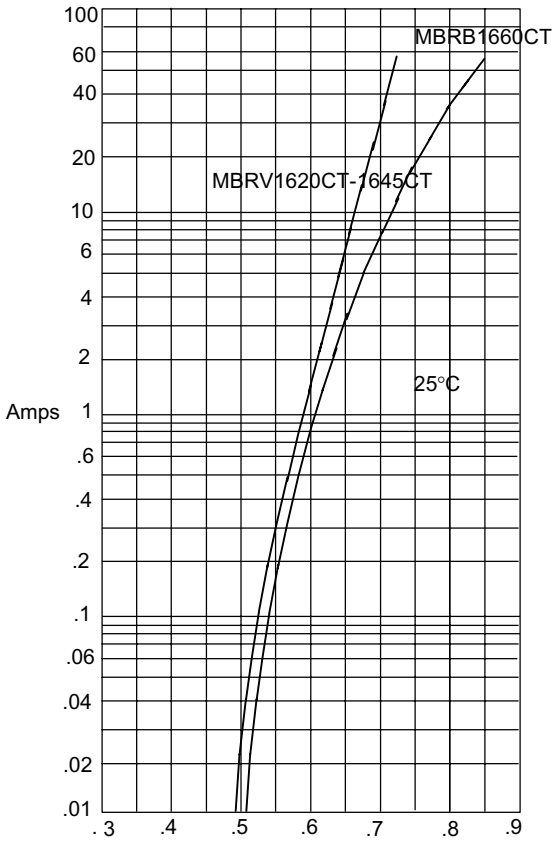
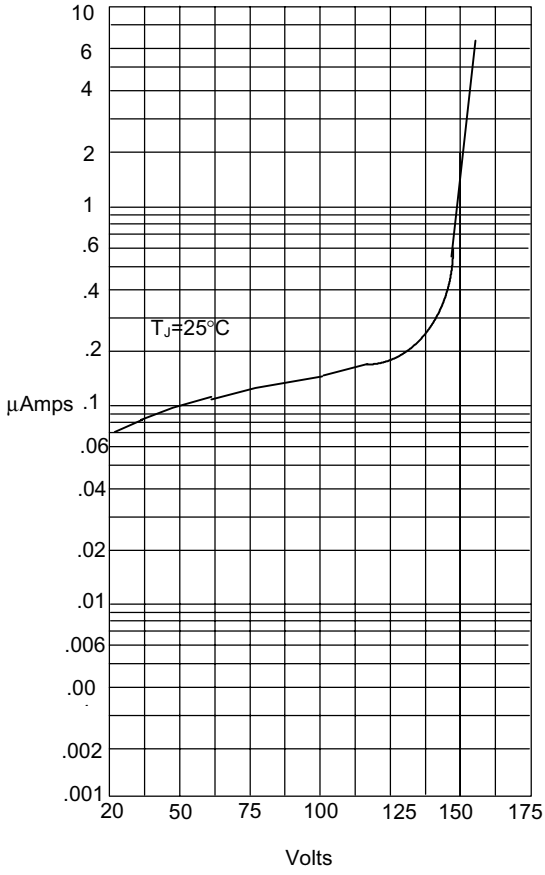


Figure 1
Typical Forward Characteristics



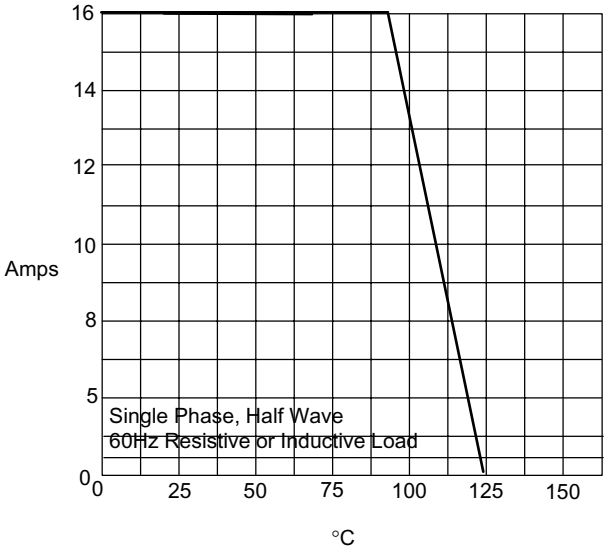
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



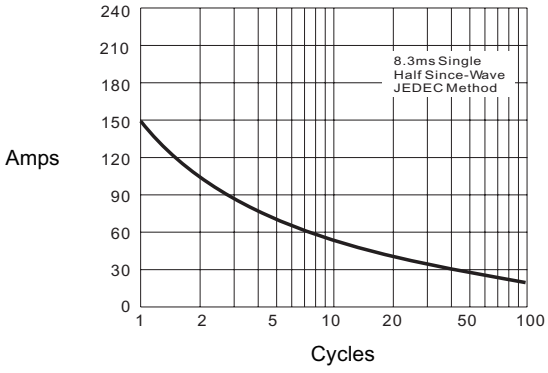
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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

Ordering Information :

Device	Packing
Part Number-BP	Tube: 1Kpcs/Box

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