

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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MBRB1520CT THRU MBRB15100CT

Features

- 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
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
 Marking: type number

Maximum Ratings

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

MCC	Maximum	Maximum	Maximum
Catalog	Recurrent	RMS	DC
Number	Peak Reverse	Voltage	Blocking
	Voltage	_	Voltage
MBRB1520CT	20V	14V	20V
MBRB1530CT	30V	21V	30V
MBRB1535CT	35V	24.5V	35V
MBRB1540CT	40V	28V	40V
MBRB1545CT	45V	31.5V	45V
MBRB1560CT	60V	42V	60V
MBRB1580CT	80V	56V	80V
MBRB15100CT	100V	70V	100V

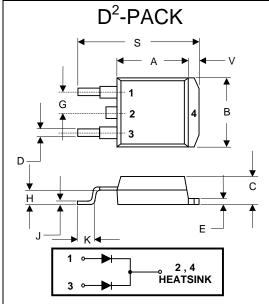
Flectrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward	$I_{F(AV)}$	15 A	T _C = 105°C
Current			
Peak Forward Surge	I_{FSM}	150A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
1520CT-45CT	V_{F}	.84V	$I_{FM} = 15A;$
1560CT		.75V	I _{FM} = 7.5A
1580CT-100CT		.92V	$T_J = 25^{\circ}C$
Maximum DC			
Reverse Current At			
Rated DC Blocking			
Voltage 1520CT-45CT	1	0.1mA	T 250C
1520CT-45CT	I _R	1.0mA	$T_J = 25^{\circ}C$
100001 10001		1.011A	T _J = 125°C
1520CT-45CT		50mA	11 - 125 0
1560CT 1580CT-100CT		100mA	
130001-10001			l

^{*}Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

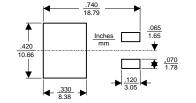
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

15 Amp Schottky Barrier Rectifier 20 to 100 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOIL	
Α	.320	.359	8.13	9.14		
В	.380	.411	9.65	10.45		
С	.160	.190	4.06	4.83		
D	.020	.035	0.51	0.89		
Е	.045	.055	1.14	1.40		
G	.095	.105	2.41	2.67		
Н	.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		

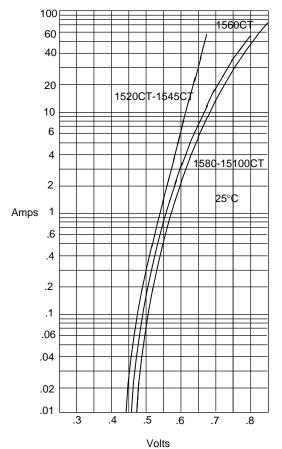




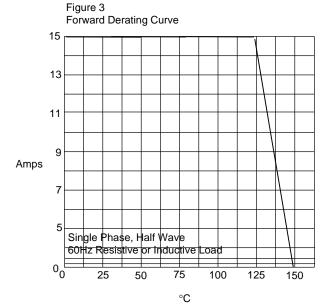
MBRB1520CT thru MBRB15100CT



Figure 1
Typical Forward Characteristics

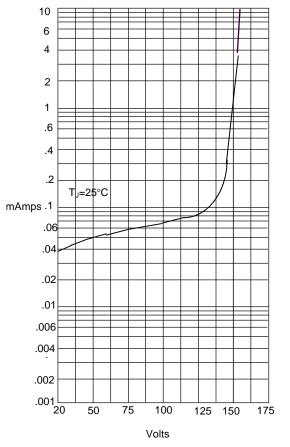


Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts

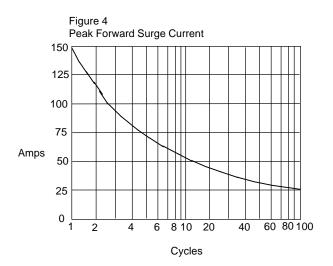


Average Forward Rectified Current - Amperes/ersus Case Temperature - $^{\circ}$ C

Figure 2 **Micro Commercial Components**Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperesversus Percent Of Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



Micro Commercial Components

Ordering Information:

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

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