

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 |

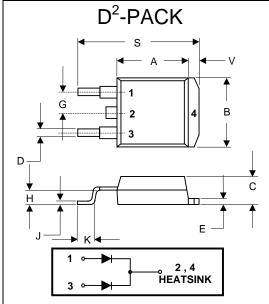
Flectrical Characteristics @ 25°C Unless Otherwise Specified

| iccirical characteris | 1100 - 20 0 | 01110000 | tinei mee epeemie |
|------------------------|----------------|----------|------------------------|
| 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%

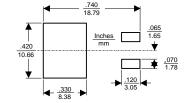
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

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 | | |

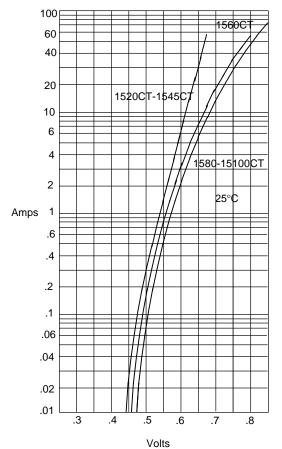




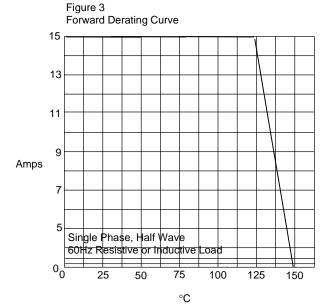
MBRB1520CT thru MBRB15100CT



Figure 1
Typical Forward Characteristics

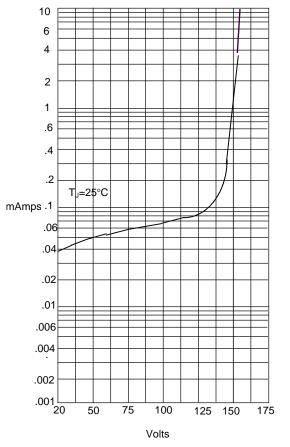


Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts

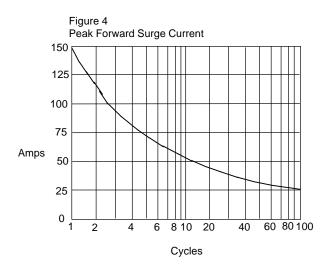


Average Forward Rectified Current - Amperes/ersus Case Temperature - $^{\circ}$ C

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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