

# M.C.C.

Micro Commercial Components  
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## MBRB2520CT THRU MBRB25100CT

### Features

- Meatl of Silicon Rectifier, Majority Conductor
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Low Power Loss

### Maximum Ratings

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

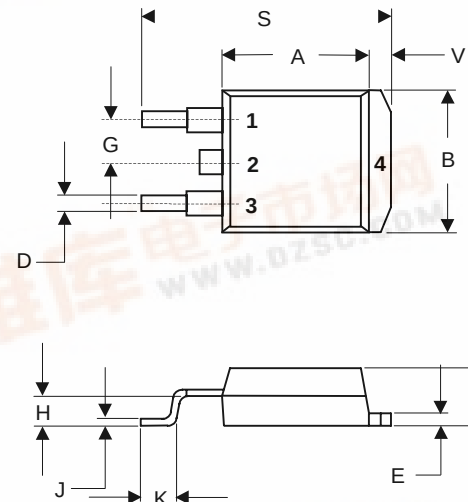
| MCC Catalog Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------------------------------|---------------------|-----------------------------|
| MBRB2520CT         | 20V                                    | 14V                 | 20V                         |
| MBRB2530CT         | 30V                                    | 21V                 | 30V                         |
| MBRB2535CT         | 35V                                    | 24.5V               | 35V                         |
| MBRB2540CT         | 40V                                    | 28V                 | 40V                         |
| MBRB2545CT         | 45V                                    | 31.5V               | 45V                         |
| MBRB2560CT         | 60V                                    | 42V                 | 60V                         |
| MBRB2580CT         | 80V                                    | 56V                 | 80V                         |
| MBRB25100CT        | 100V                                   | 70V                 | 100V                        |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                         |             |                      |                                                                               |
|---------------------------------------------------------|-------------|----------------------|-------------------------------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 25 A                 | $T_A = 130^\circ\text{C}$                                                     |
| Peak Forward Surge Current                              | $I_{FSM}$   | 150A                 | 8.3ms, half sine                                                              |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | .82V<br>.75V<br>.84V | $I_{FM} = 30\text{ A};$<br>$I_{FM} = 15\text{ A}$<br>$I_{FM} = 12.5\text{ A}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 0.2mA                | $T_A = 25^\circ\text{C}$                                                      |

## 25 Amp Schottky Barrier Rectifier 20 to 100 Volts

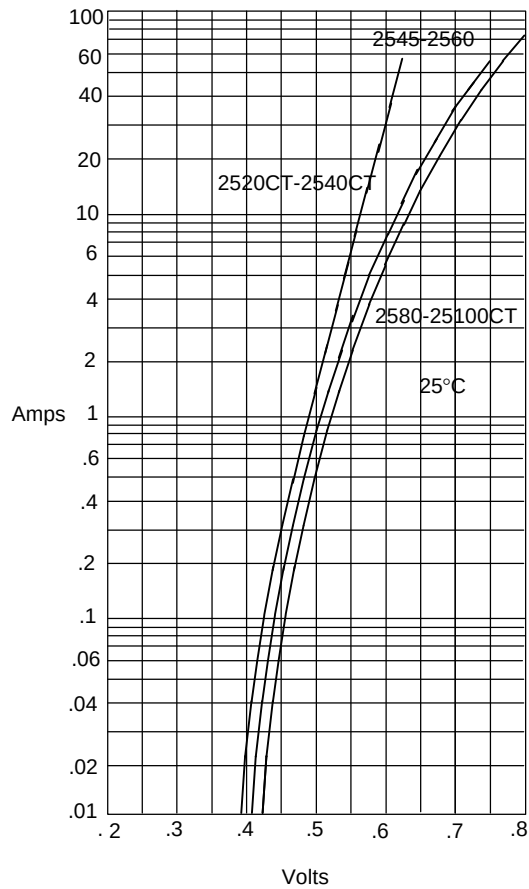
### D<sup>2</sup>-PACK



| DIMENSIONS |        |      |       |       |      |
|------------|--------|------|-------|-------|------|
| DIM        | INCHES |      | MM    |       | NOTE |
|            | MIN    | MAX  | MIN   | MAX   |      |
| A          | .340   | .380 | 8.64  | 9.65  |      |
| B          | .380   | .405 | 9.65  | 10.29 |      |
| C          | .160   | .190 | 4.06  | 4.83  |      |
| D          | .020   | .035 | .051  | 0.89  |      |
| E          | .45    | .055 | 1.14  | 1.40  |      |
| G          | .100   | BSC  | 2.54  | BSC   |      |
| H          | .080   | .110 | 2.03  | 2.79  |      |
| J          | .018   | .025 | 0.46  | 0.64  |      |
| K          | .090   | .110 | 2.29  | 2.79  |      |
| S          | .575   | .625 | 14.60 | 15.88 |      |
| V          | .045   | .055 | 1.14  | 1.40  |      |

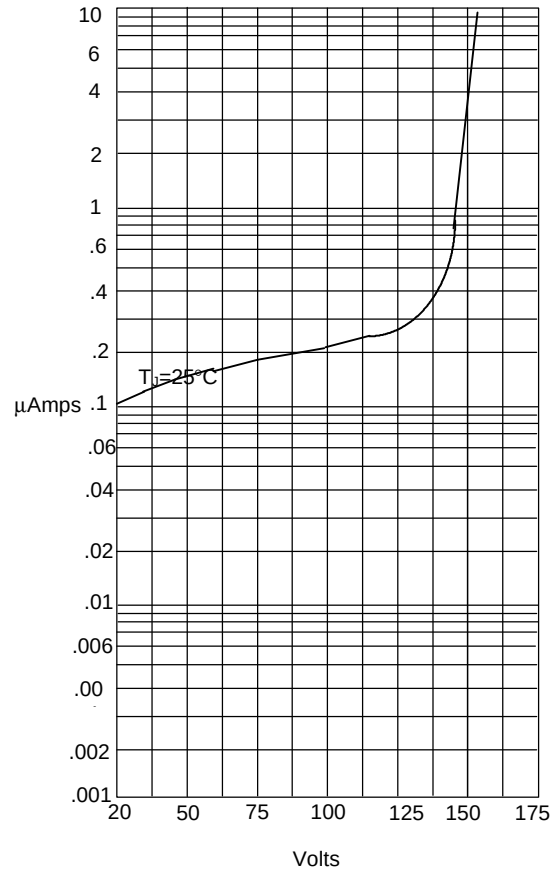
# MBRB2520CT thru MBRB25100CT

Figure 1  
Typical Forward Characteristics



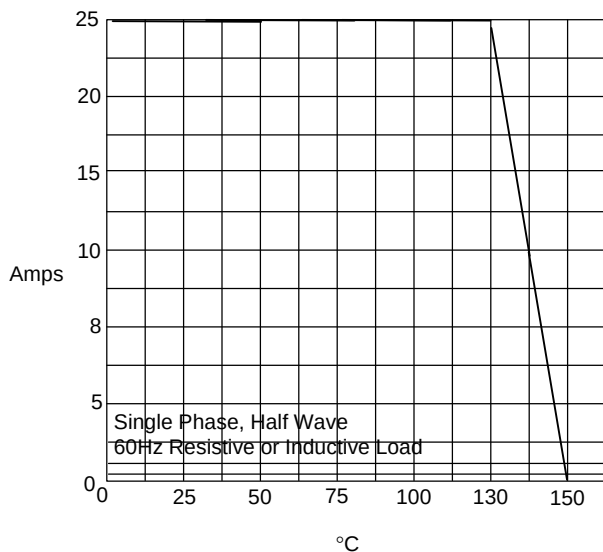
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



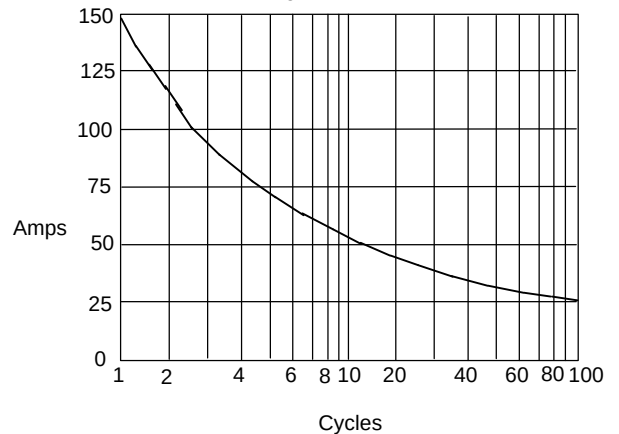
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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