

20.0A SCHOTTKY BARRIER RECTIFIERS -40V- 100V



TO-220AB

Features

- Metal of Silicon Rectifier, Majority Conduction
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Marking : type number
- **Pb-Free package is available**

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

- Mounting Torque: 5 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

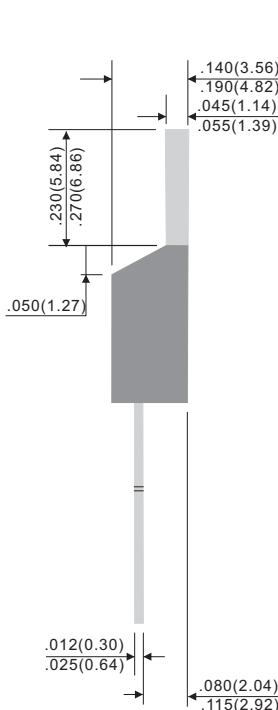
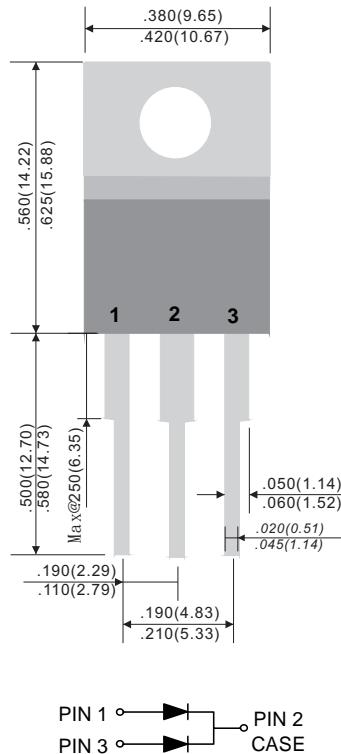
Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2040CT	40V	28V	40V
MBR2045CT	45V	31.5V	45V
MBR2060CT	60V	42V	60V
MBR20100CT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	$T_A = 120^\circ C$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 20I ECT-2045CT 2060CT 20FEOCT 20I OCT-2045CT 2060CT 20FEOCT 20I OCT-2045CT 2060CT 20FEOCT	V_F	.70V .80V .85V .84V .95V .95V .72V .85V .85V	$I_{FM} = 10A; T_A = 25^\circ C$ $I_{FM} = 20A; T_A = 25^\circ C$ $I_{FM} = 20A; T_A = 125^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage 2040CT~2045CT 2060CT~20100CT 2040CT~2045CT 2060CT~20100CT	I_R	0.1mA 0.15mA 50mA 150mA	$T_A = 25^\circ C$ $T_A = 125^\circ C$

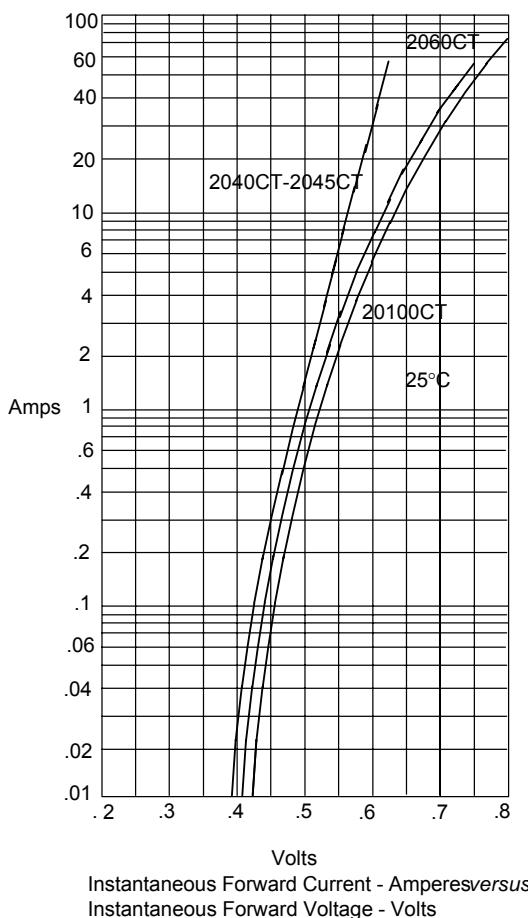
*Pulse Test: Pulse Width 300μsec, Duty Cycle 2%

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



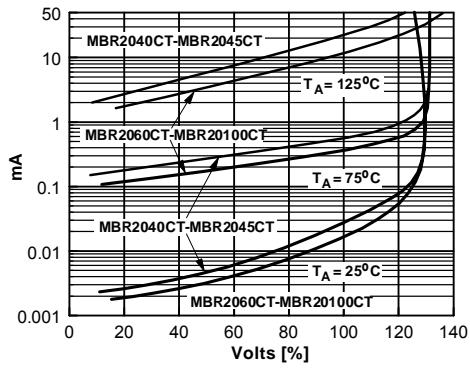
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Figure 1
Typical Forward Characteristics



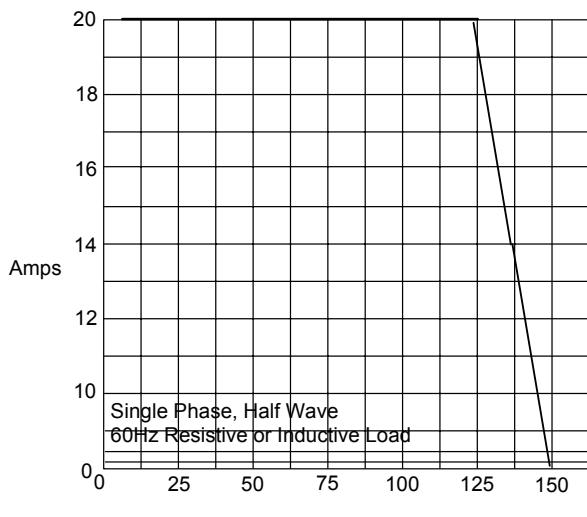
Volts
Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



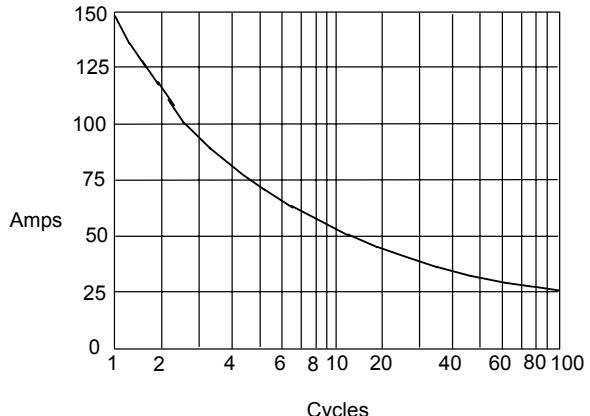
Instantaneous Reverse Leakage Current - mA
Percent Of Rated Peak Reverse Voltage - Volts%

Figure 3
Forward Derating Curve



Single Phase, Half Wave
60Hz Resistive or Inductive Load
Average Forward Rectified Current - Amperesversus
Ambient Temperature - $^{\circ}\text{C}$

Figure 4
Peak Forward Surge Current



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