

MBR2520CT THRU MBR2560CT

**25 Amp
Schottky
Barrier Rectifier
20 to 100 Volts**

Features

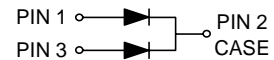
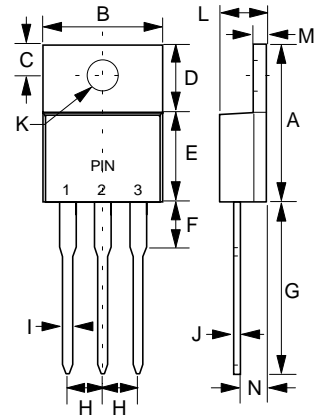
- Meatl of Silicon Rectifier, Majority Conductor
- Guard ring for transient protection
- High surge capacity
- High Current Capability, High Efficiency
- Low Power Loss

Maximum Ratings

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

Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2520CT	20V	14V	20V
MBR2530CT	30V	21V	30V
MBR2535CT	35V	24.5V	35V
MBR2540CT	40V	28V	40V
MBR2545CT	45V	31.5V	45V
MBR2560CT	60V	42V	60V

TO-220AB



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30 A	$T_A = 130^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 2520CT-2540CT 2545CT-2560CT	V_F	.82V .75V	$I_{FM} = 30A;$ $I_{FM} = 15A$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage 2520CT-2540CT 2545CT-2560CT	I_R	0.2mA 1mA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance	C_J	450pF	Measured at 1.0MHz, $V_R=4.0V$

DIMENSIONS

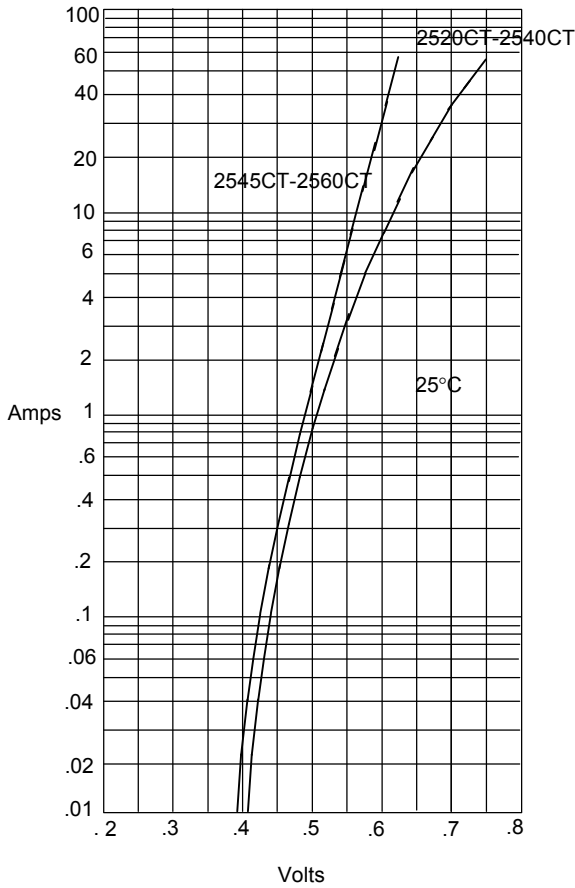
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

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



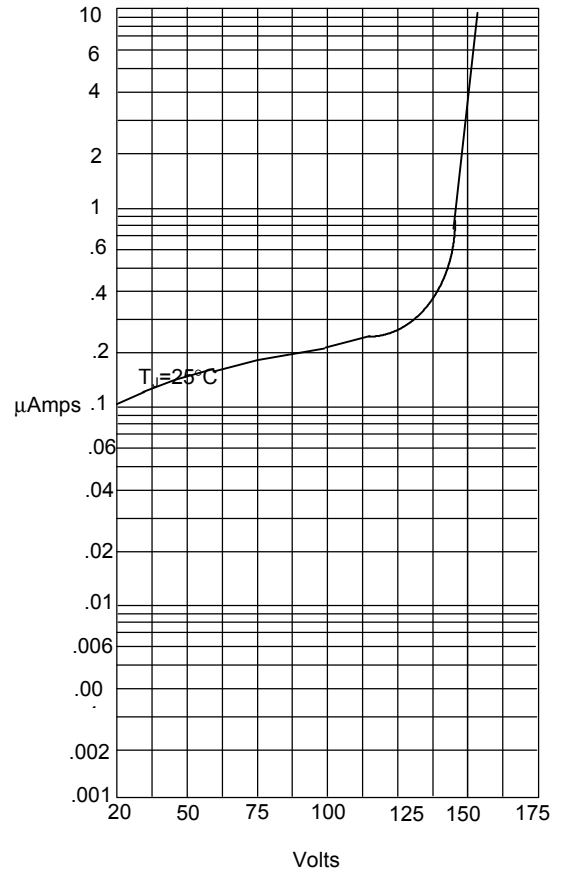
MBR2520CT thru MBR2560CT

Figure 1
Typical Forward Characteristics



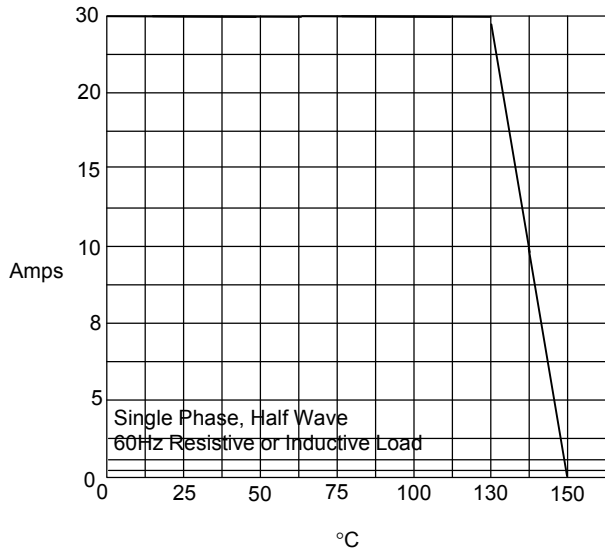
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



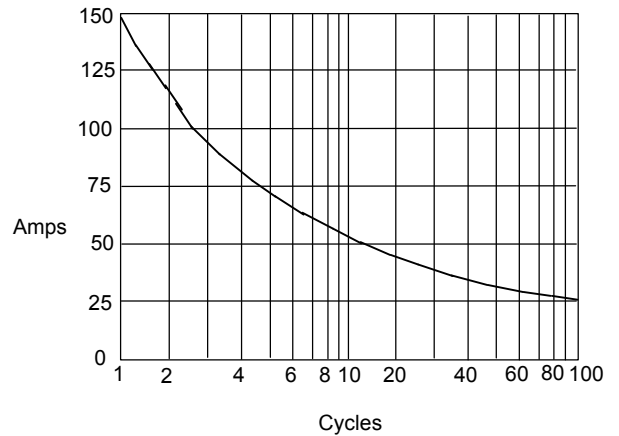
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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