Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MBR40020CT THRU MBR300100CT

400 Amp Schottky Barrier Rectifier 20 to 100 Volts

Features

- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

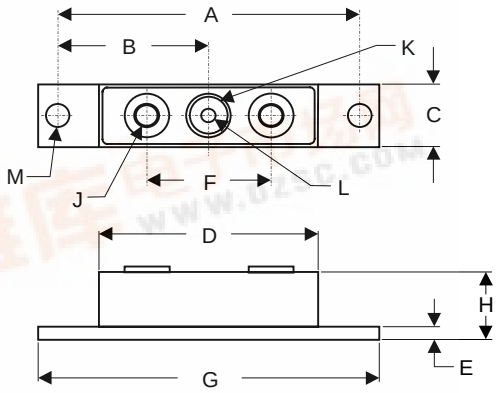
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR40020CT	20V	14V	20V
MBR40030CT	30V	21V	30V
MBR40035CT	35V	24.5V	35V
MBR40040CT	40V	28V	40V
MBR40045CT	45V	31.5V	45V
MBR40060CT	60V	42V	60V
MBR40080CT	80V	56V	80V
MBR400100CT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	400 A	T_L = 125°C
Peak Forward Surge Current	I_{FSM}	3000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 40020-40045CT 40060CT 40080-400100CT	V_F	 .63 V .75 V .84 V	I_{FM} = 200 A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 mA	T_A = 25°C
Typical Junction Capacitance	C_J	300pF	Measured at 1.0MHz, V_R=4.0V

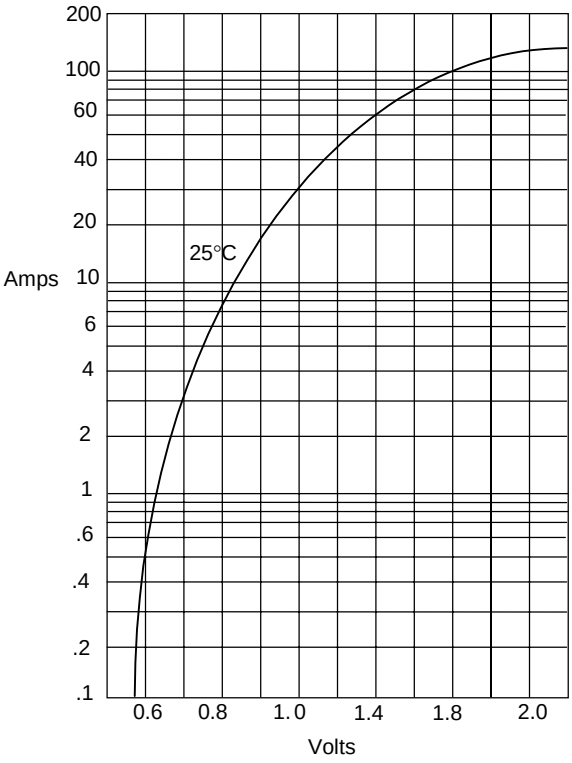
*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

FULL PACK



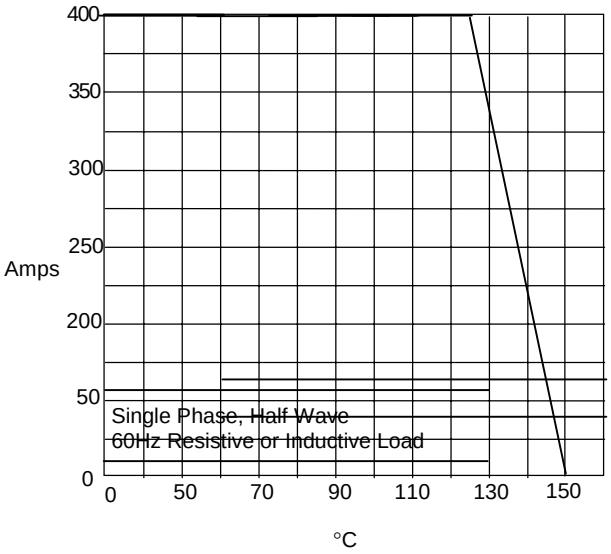
DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	3.150	NOM	80.01	NOM	
B	1.565	1.585	39.75	40.26	
C	.700	.800	17.78	20.32	
E	.119	.132	3.02	3.35	
F	1.375	REF	34.92	REF	
G	3.55	3.65	90.17	92.71	
H	.590	.620	14.99	15.75	
J	1/4 -	UNF	FULL		
K	.380	.410	9.65	10.41	∅
L	.185	.195	4.70	4.95	∅
L	.275	.295	6.99	7.49	∅

Figure 1
Typical Forward Characteristics



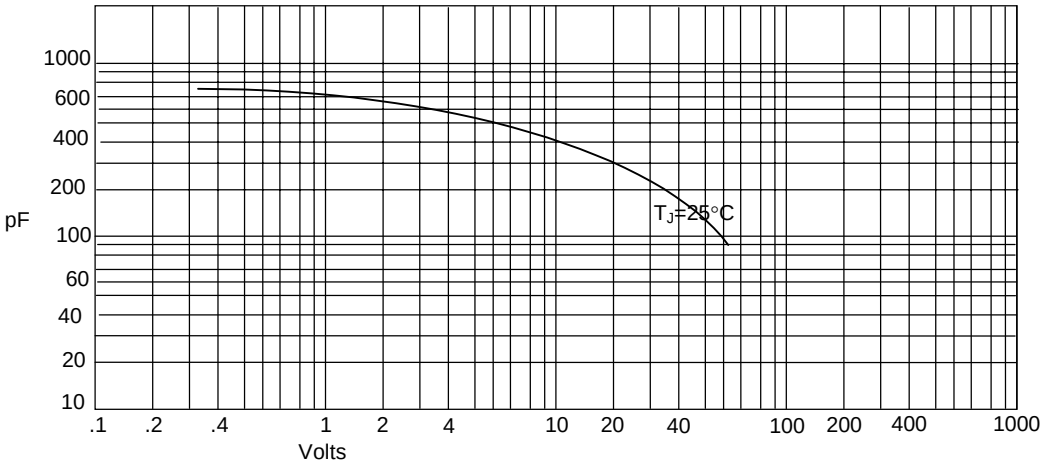
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



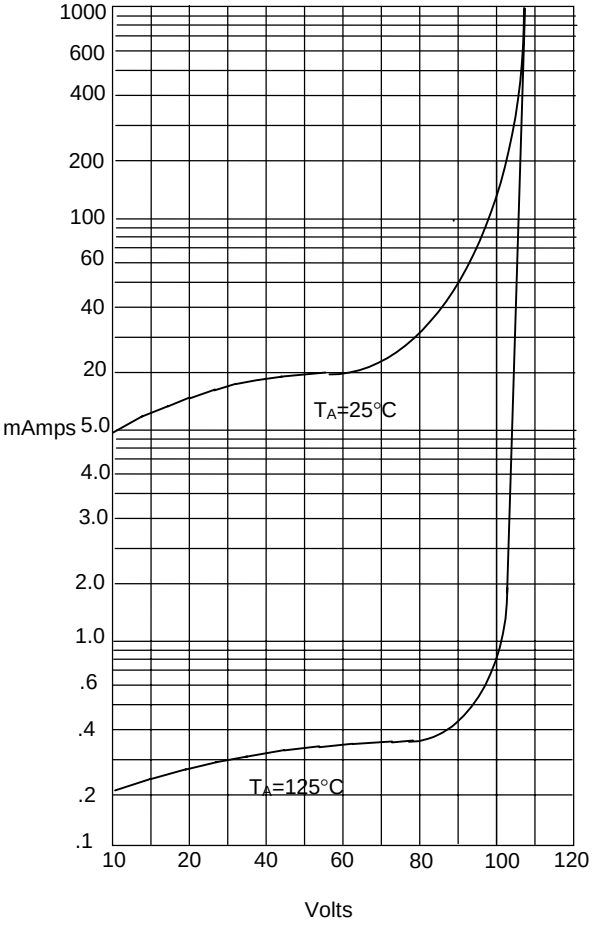
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



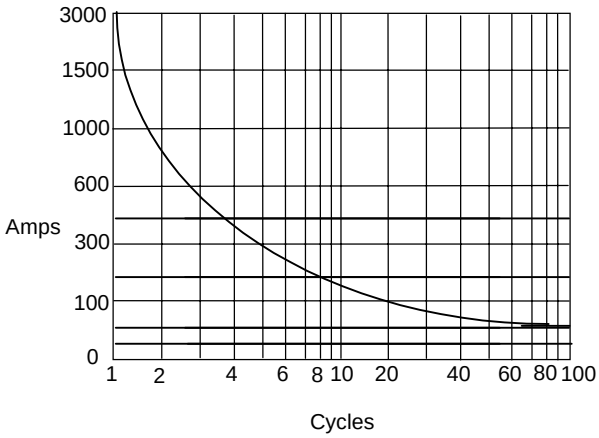
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



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

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles