



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

# MBR40020CT THRU MBR300100CT

## Features

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

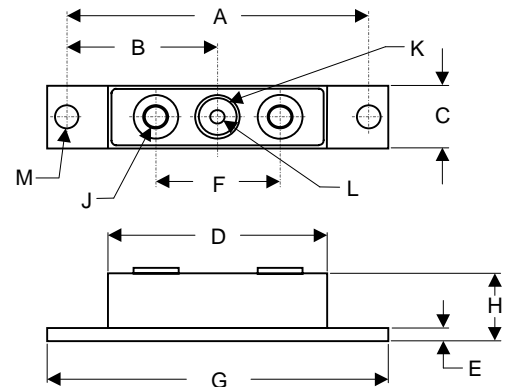
## 400 Amp Schottky Barrier Rectifier 20 to 100 Volts

## 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

## FULL PACK



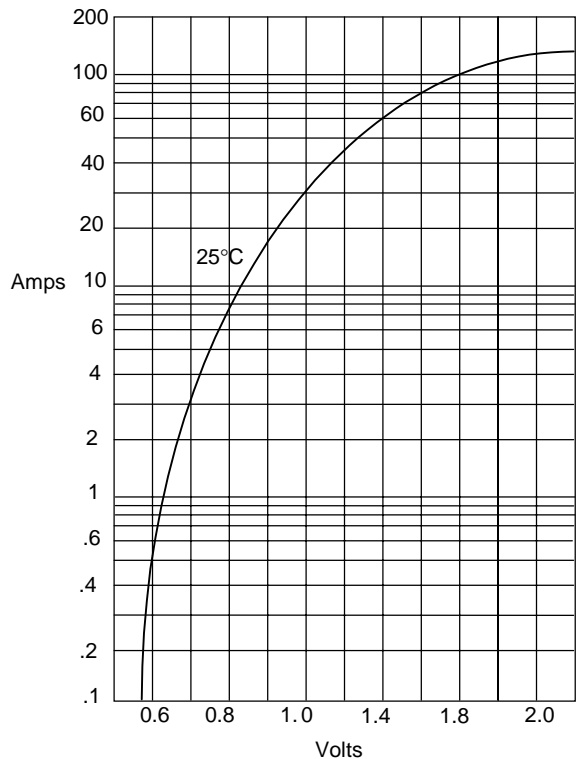
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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

DIM	DIMENSIONS				NOTE
	INCH ES		MM		
	MIN	MAX	MIN	MAX	
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	∅

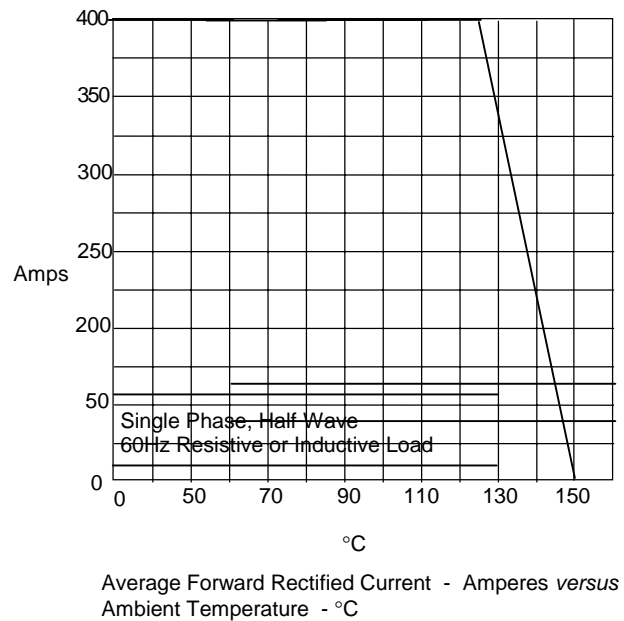
\*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

Figure 1  
Typical Forward Characteristics



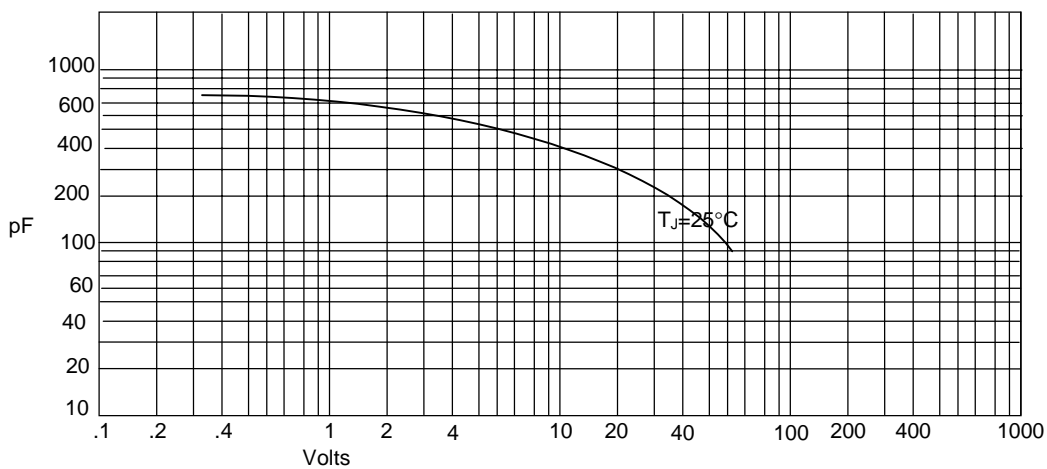
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



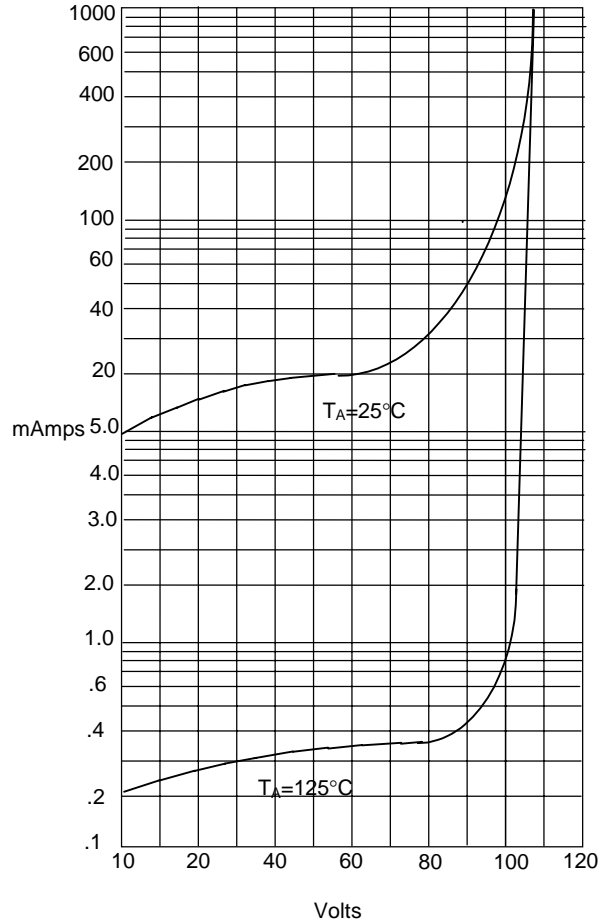
Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance

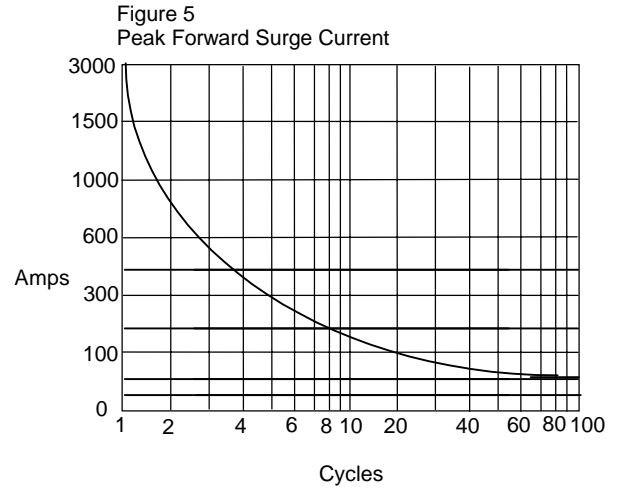


Junction Capacitance - pF versus  
Reverse Voltage - Volts

Figure 4  
Typical Reverse Characteristics



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



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