Micro Commercial Components
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MBR3030CT THRU MBR3060CT

30 Amp Schottky Barrier Rectifier 30 to 60 Volts

Features

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

Maximum Ratings

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

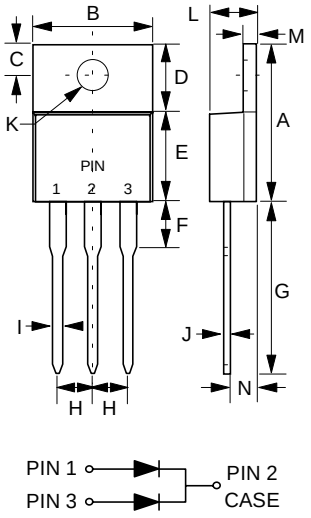
MCC Part Number	Maximum Rcurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR3030CT	30V	21V	30V
MBR3035CT	35V	24.5V	35V
MBR3040CT	40V	28V	40V
MBR3045CT	45V	31.5V	45V
MBR3050CT	50V	35V	50V
MBR3060CT	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30 A	T_C =100°C
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MBR3030CT-3045CT MBR3050CT-3060CT MBR3030CT-3045CT MBR3050CT-3060CT	V_F	 .84 V .95 V .72 V .85 V	I_{FM} = 30.0A; T_J = 25°C T_J = 125°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.2mA	T_J = 25°C
Typical Junction Capacitance MBR3030CT-3045CT MBR3050CT-3060CT	C_J	 450pF 400pF	Measured at 1.0MHz, V_R=4.0V

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

TO-220AB



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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	

RATING AND CHARACTERISTIC CURVES
MBR3030CT thru MBR3060CT

FIG.1 - FORWARD CURRENT DERATING CURVE

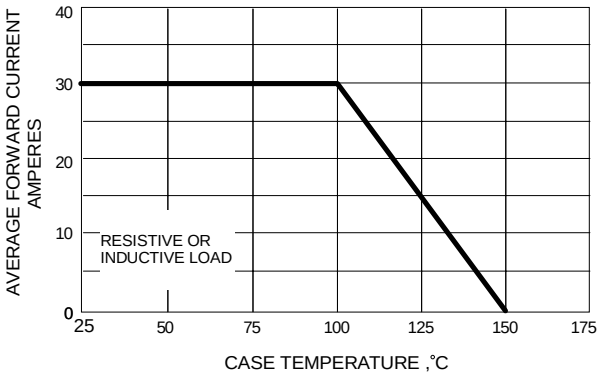


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

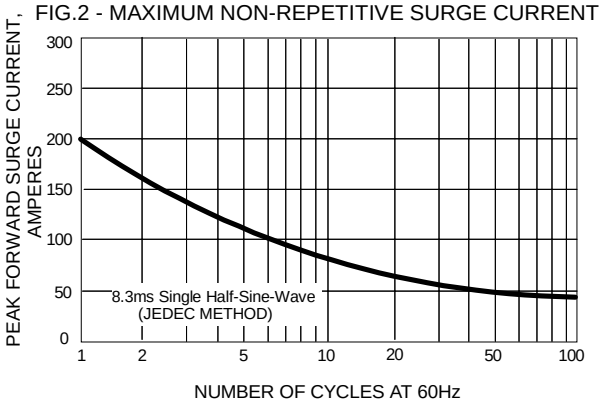


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

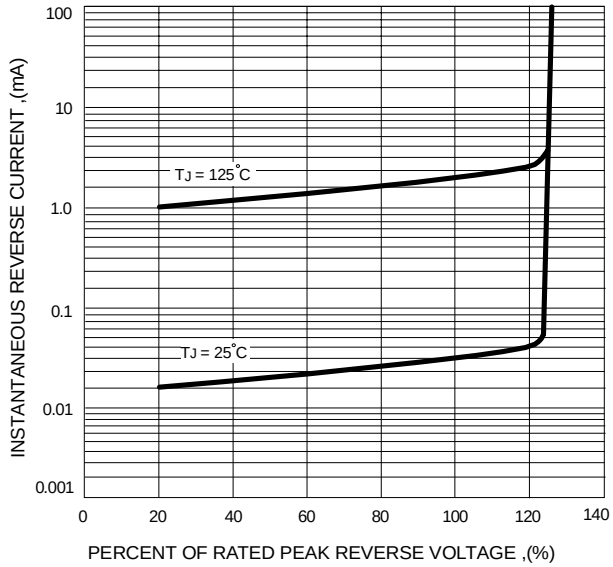


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

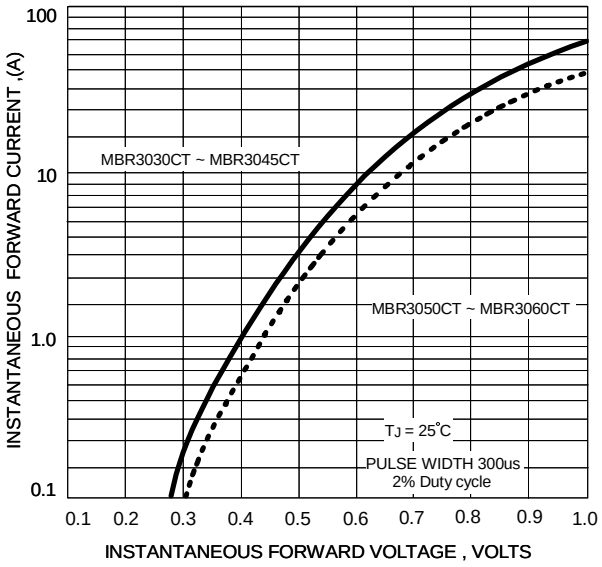


FIG.5 - TYPICAL JUNCTION CAPACITANCE

