Micro Commercial Components
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MBR1030CT THRU MBR1060CT

10 Amp Schottky Barrier Rectifier 30-60 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: -55°C to +150°C
- Storage Temperature: -55°C to +175°C

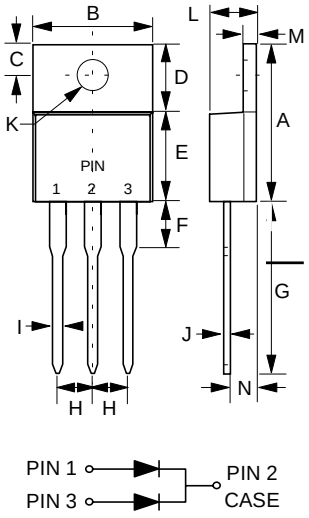
Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1030CT	MBR1030CT	30V	21V	30V
MBR1035CT	MBR1035CT	35V	24.5V	35V
MBR1040CT	MBR1040CT	40V	28V	40V
MBR1045CT	MBR1045CT	45V	31.5V	45V
MBR1050CT	MBR1050CT	50V	35V	50V
MBR1060CT	MBR1060CT	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	T_C = 105°C
Peak Forward Surge Current	I_{FSM}	125A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element MBR1030CT-45CT MBR1050CT-60CT MBR1030CT-45CT MBR1050CT-60CT	V_F	.70V .80V .57V .65V	I_{FM} = 5A T_J = 25°C I_{FM} = 5A T_J = 125°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	0.1mA 15mA	T_J = 25°C T_J = 125°C
Typical Junction Capacitance MBR1030CT-45CT MBR1050CT-60CT	C_J	170pF 220pF	Measured at 1.0MHz, V_R=4.0V

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

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
MBR1030CT thru MBR1060CT

FIG.1 - FORWARD CURRENT DERATING CURVE

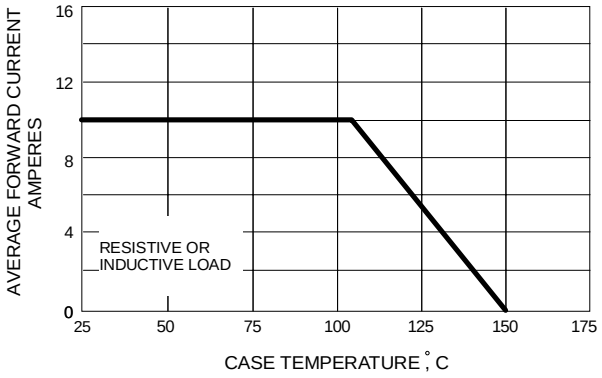


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

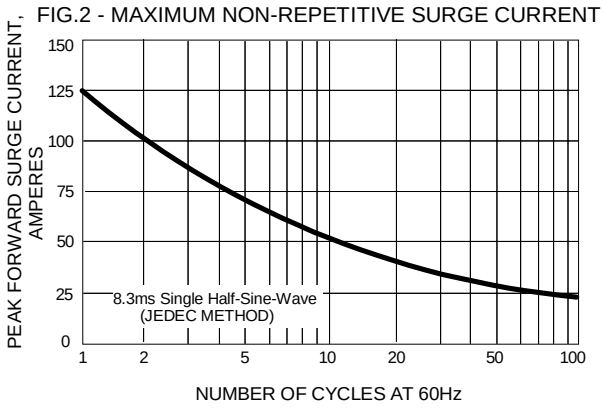


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

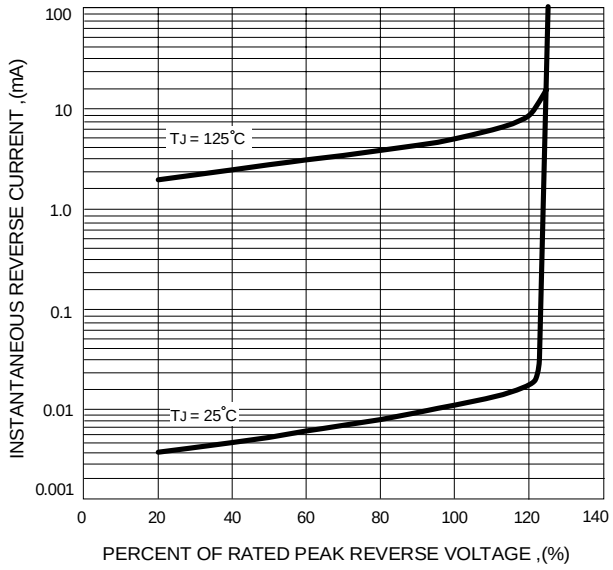


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

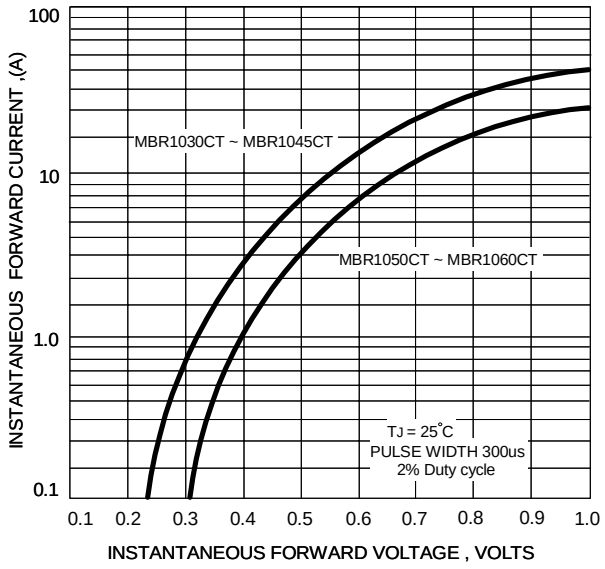


FIG.5 - TYPICAL JUNCTION CAPACITANCE