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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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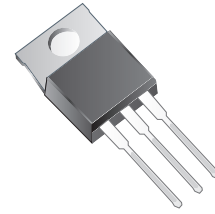


MBR2030CT-G Thru. MBR20150CT-G

Voltage: 30 to 150 V

Current: 20.0 A

RoHS Device

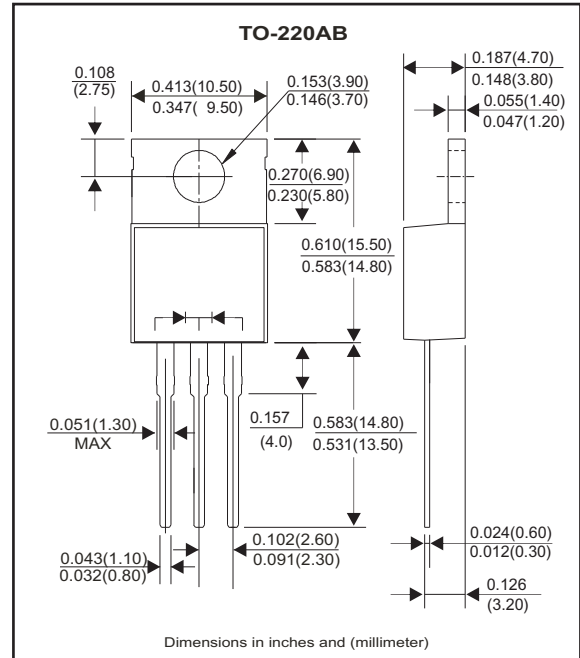


Features

- Metal of silicon rectifier, majority carrier conduction.
- Guard ring for transient protection.
- Low power loss, high efficiency.
- High current capability, low VF.
- High surge capacity.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Mechanical Data

- Case: TO-220AB, molded plastic
- Epoxy: UL 94-V0 rate flame retardant.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 2.24 grams



Electrical Characteristics (at TA=25°C unless otherwise noted)

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load derate current by 20%.

Parameter	Symbol	MBR 2030CT-G	MBR 2040CT-G	MBR 2050CT-G	MBR 2060CT-G	MBR 2080CT-G	MBR 20100CT-G	MBR 20150CT-G	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V _{RMS}	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V _{DC}	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current (See Fig.1)	I _(AV)	20.0							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load(JEDEC Method)	I _{FSM}	150							A
Peak Forward Voltage (Note 1)	V _F	IF=10A@ T _J = 25°C	-	0.80	0.85	0.95			V
		IF=10A@ T _J =125°C	0.57	0.70	0.75	0.85			
		IF=20A@ T _J = 25°C	0.84	0.95	0.95	1.05			
		IF=20A@ T _J =125°C	0.72	0.85	0.85	0.95			
Maximum DC Reverse Current at Rate DC Blocking Voltage	I _R	@ T _J = 25°C	0.10	0.10	0.10	0.10			mA
		@ T _J = 125°C	15.0	10.0	7.50	5.00			
Typical Junction Capacitance (Note2)	C _J	400	320						pF
Typical Thermal Resistance (Note3)	R _{θJC}	1.50				3.50			°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +175							°C

NOTES:

1. 300us pulse width, 2% duty cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to case.

RATING AND CHARACTERISTIC CURVES (MBR2030CT-G Thru. MBR20150CT-G)

FIG.1- Forward Current Derating Curve

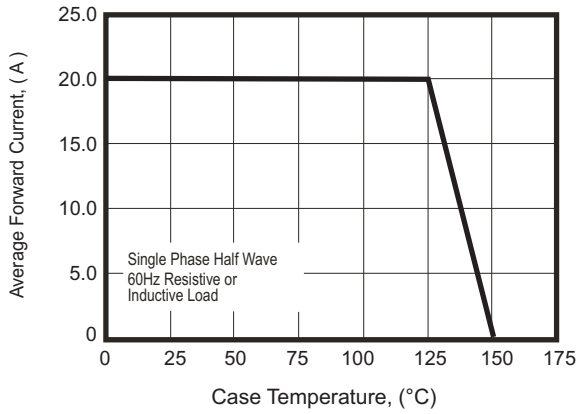


FIG.2- Maximum Non-Repetitive Surge Current

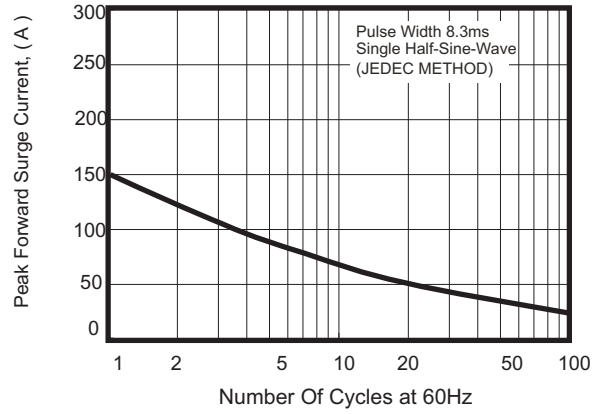


FIG.3- Typical Rever Characteristics

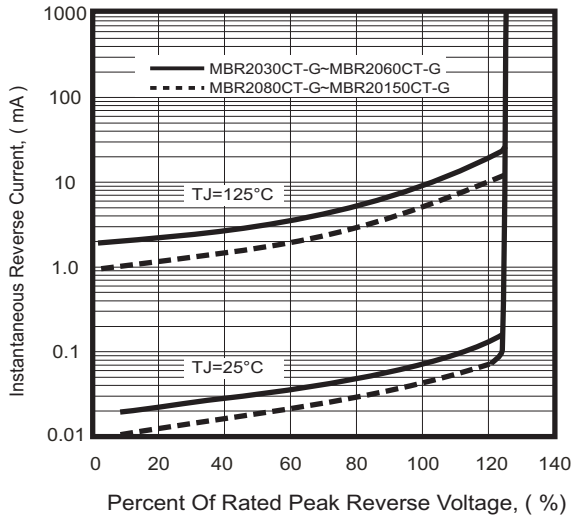


FIG.4- Typical Forward Characteristics

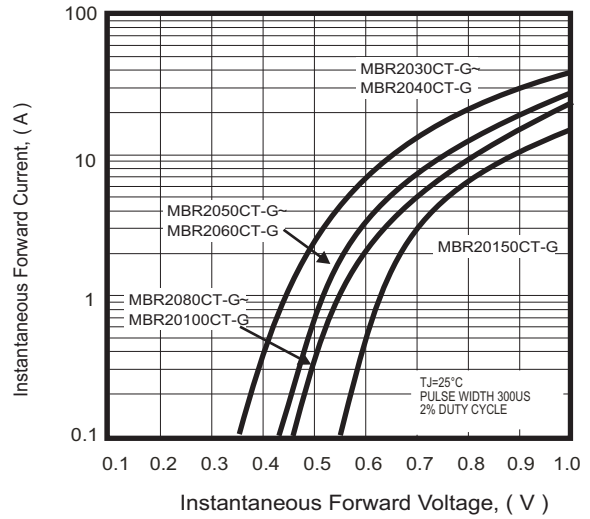
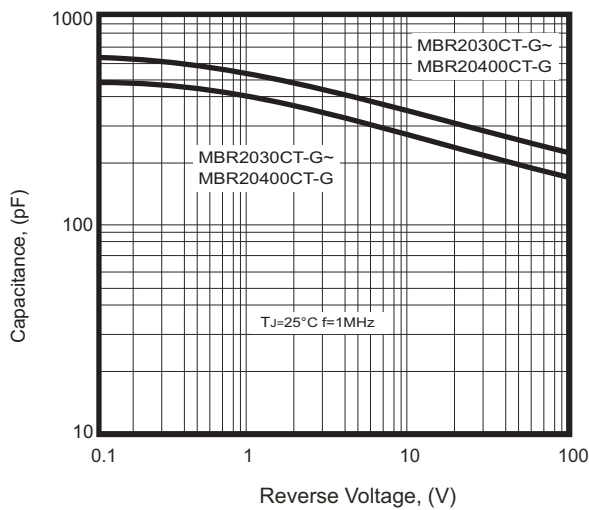
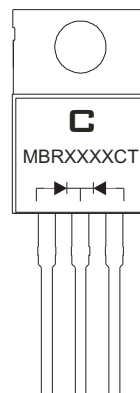


FIG.5- Typical Junction Capacitance



Marking Code

Part Number	Marking code
MBR2030CT-G	MBR2030CT
MBR2040CT-G	MBR2040CT
MBR2050CT-G	MBR2050CT
MBR2060CT-G	MBR2060CT
MBR2080CT-G	MBR2080CT
MBR20100CT-G	MBR20100CT
MBR20150CT-G	MBR20150CT



XXXX = Product type marking code
 C = Comchip Logo

Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
TO-220AB	50	8,000