Elektronische Bauelemente

MBR1040~MBR10200

Voltage 40V~ 200V

10Amp Schottky Barrier Rectifiers

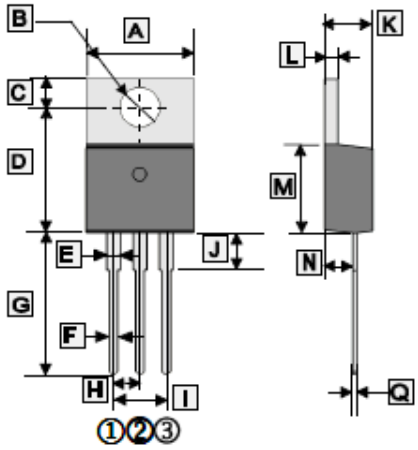
RoHS Compliant Product

A suffix of "-C" specifies halogen free

FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
  Flame Retardant Epoxy Molding Compound
- Metal Silicon Junction, Majority Carrier Conduction
- Low Power Loss, High Efficiency
- High current capability
- For Use In Low Voltage, High Frequency Inverters Free Wheeling, and Polarlity Protection Applications

TO-220J



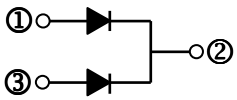
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.57	10.57	I	4.68	5.48
B	3.54	4.14	J	2.95	3.96
C	2.54	2.94	K	4.27	4.87
D	11.86	13.26	L	1.07	1.47
E	0.97	1.57	M	8.0	10.0
F	0.51	1.11	N	2.03	2.92
G	12.7	13.8	Q	0.30	0.65
H	2.540 TYP.				

MECHANICAL DATA

- Case: TO-220J Molded Plastic
- Terminals: Solder Plated, Solderable Per MIL-STD-750 Method 2026
- Polarity: As Marked
- Mounting Position: Any

ORDER INFORMATION

Part Number	Type
MBR1040~MBR10200	Lead (Pb)-free
MBR1040-C~MBR10200-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Ratings					Unit
			MBR 1040	MBR 1060	MBR 10100	MBR 10150	MBR 10200	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	40	60	100	150	200	V
Maximum RMS Voltage		V_{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage		V_{DC}	40	60	100	150	200	V
Maximum Average Forward Current		$I_{F(AV)}$	10					A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	100		110			A
Maximum Forward Voltage @5A Per Leg		V_F	0.7	0.8	0.85	0.92		V
Maximum DC Reverse Current @Rated DC Blocking Voltage	T_J=25°C	I_R	0.05		0.02			mA
	T_J=125°C		20					
Typical Thermal Resistance		$R_{\theta JC}$	2					°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55~150					°C

RATINGS AND CHARACTERISTIC CURVES

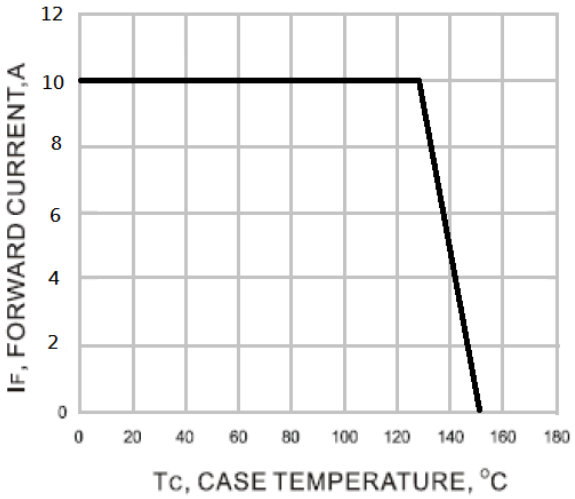


Fig.1 - FORWARD CURRENT DERATING CURVE

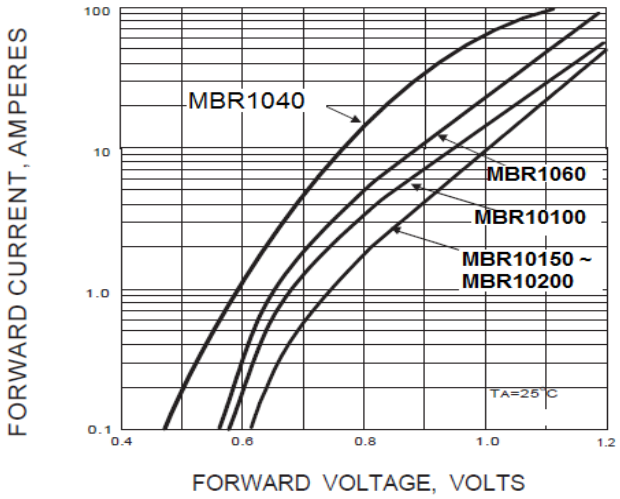


Fig.2 - TYPICAL INSTANTANEOUS FORWAR CHARACTERISTIC

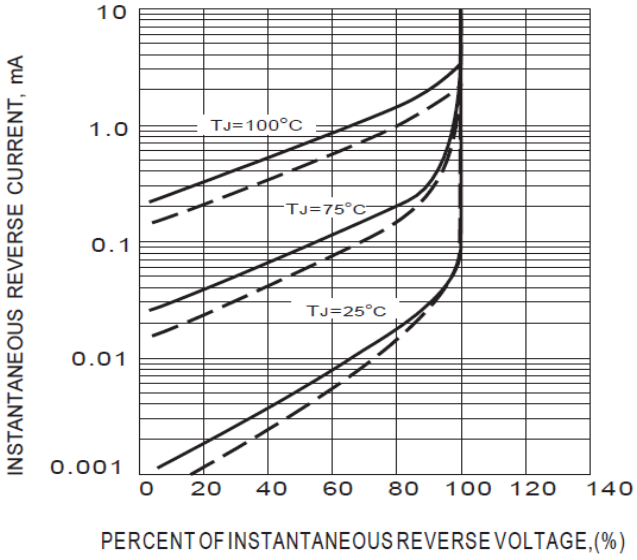


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

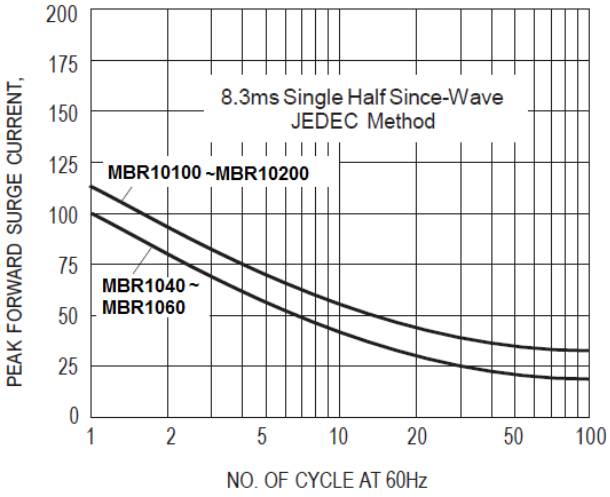


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS