Elektronische Bauelemente

MBR3040~MBR30200

Voltage 40V~200V

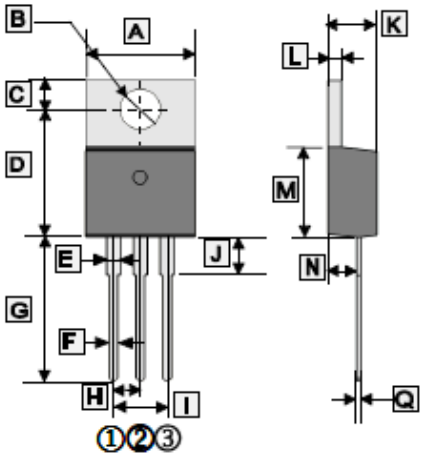
30.0 Amp Schottky Barrier Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-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



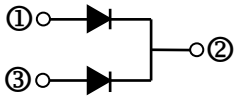
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.57	10.57	I	4.68	5.48
B	3.54	4.14	J	2.95	3.96
C	2.54	2.94	K	4.27	4.87
D	11.86	12.46	L	1.07	1.47
E	0.97	1.57	M	8.00	10.00
F	0.51	1.11	N	2.03	2.92
G	13.40	13.80	Q	0.30	0.65
H	2.540 TYP.				

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
MBR3040~MBR30200	Lead (Pb)-free
MBR3040-C~MBR30200-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter		Symbol	Ratings					Unit
			MBR3040	MBR3060	MBR30100	MBR30150	MBR30200	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	40	60	100	150	200	V
Maximum RMS Voltage		V_{RMS}	28	42	70	105	140	
Maximum DC Blocking Voltage		V_{DC}	40	60	100	150	200	
Maximum Average Forward Current		$I_{F(AV)}$	30					A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	200					A
Maximum Forward Voltage @15A per leg		V_F	0.7	0.8	0.85	0.92		V
Maximum DC Reverse Current @Rated DC Blocking Voltage	T_J=25℃	I_R	0.05					mA
	T_J=125℃		20					
Typical Thermal Resistance		$R_{\theta JC}$	2					℃/W
Operating & Storage Temperature Range		T_J, T_{STG}	-55~150					℃

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RATINGS AND CHARACTERISTIC CURVES

Fig.1- FORWARD CURRENT DERATING CURVE

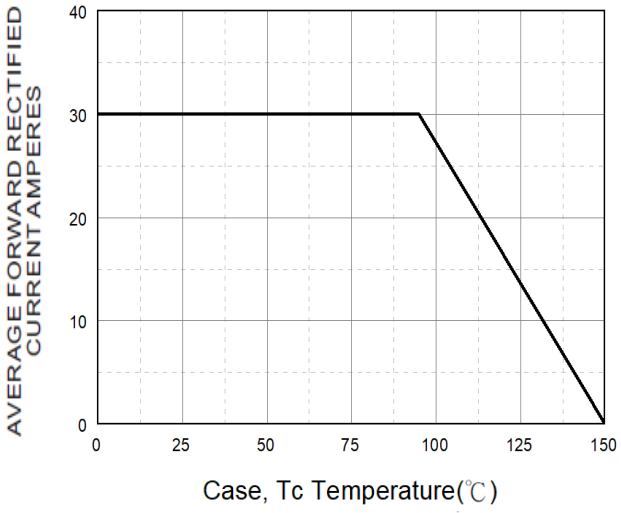

Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

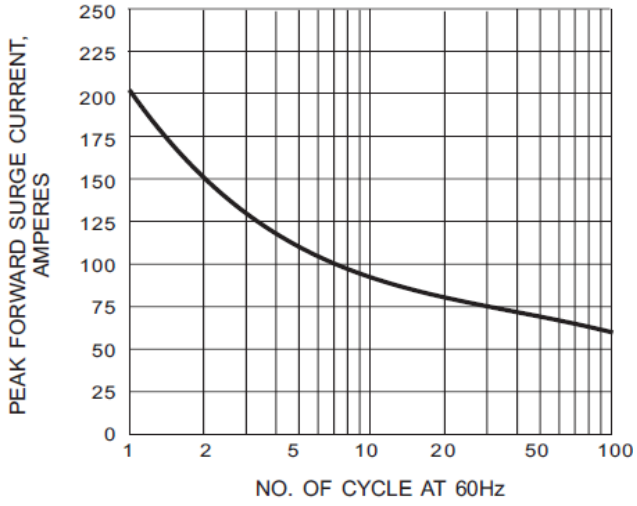

Fig.3- TYPICAL REVERSE CHARACTERISTIC

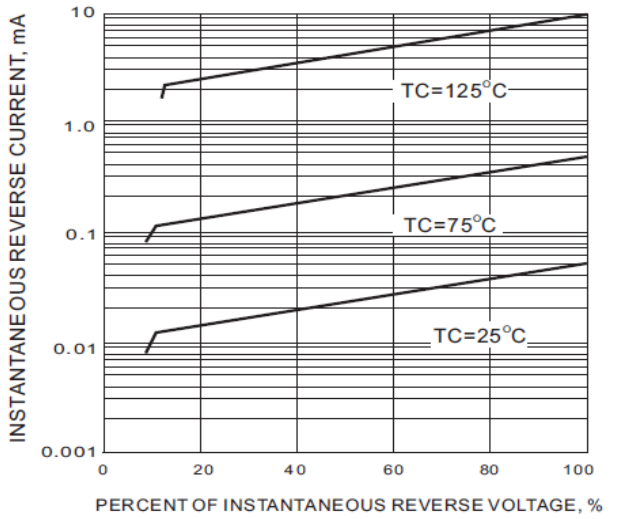

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC