Elektronische Bauelemente

MBR2040F~MBR20200F

Voltage 40V~ 100V

20Amp Schottky Barrier Rectifiers

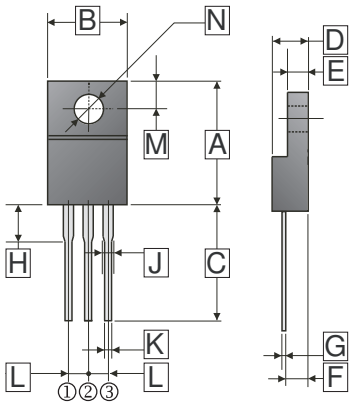
RoHS Compliant Product

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

ITO-220J



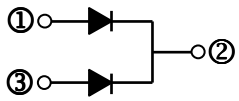
MECHANICAL DATA

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

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.5	15.5	H	3.8 TYP.	
B	9.5	10.5	J	1.30 REF.	
C	13.20 REF.		K	0.3	0.9
D	4.24	4.84	L	2.54 REF.	
E	2.52	3.20	M	2.70 REF.	
F	2.50	2.90	N	ϕ 3.5 REF.	
G	0.47	0.75			

ORDER INFORMATION

Part Number	Type
MBR2040F~MBR20200F	Lead (Pb)-free
MBR2040F-C~MBR20200F-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
			MBR 2040F	MBR 2060F	MBR 20100F	MBR 20150F	MBR 20200F	
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		$I_{F(AV)}$	20					A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	150					A
Maximum Forward Voltage @10A 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		$R_{\theta JC}$	4					℃/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55~150					℃

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RATINGS AND CHARACTERISTIC CURVES

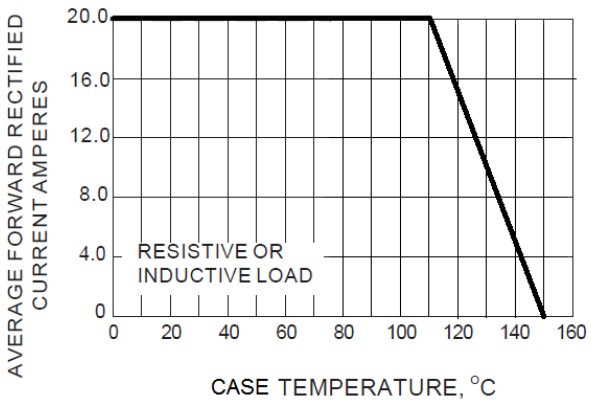

Fig.1- FORWARD CURRENT DERATING CURVE

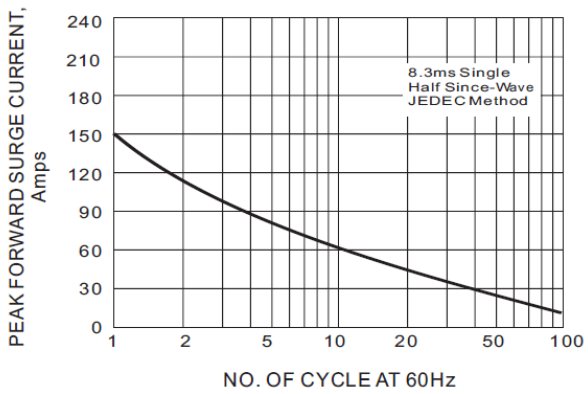

Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

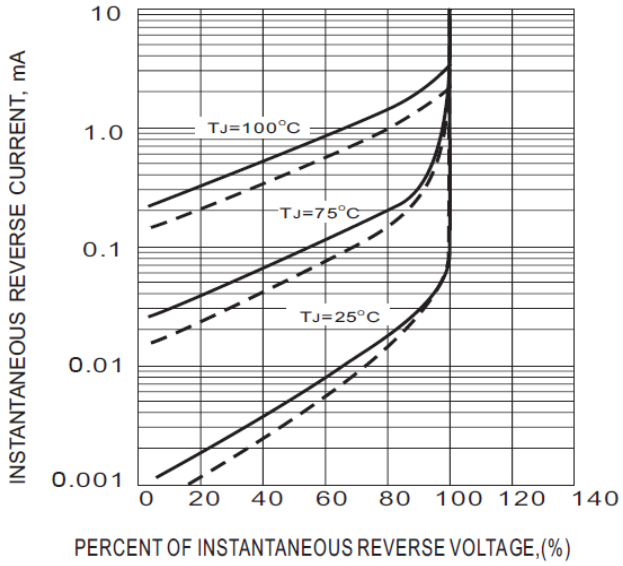

Fig.3- TYPICAL REVERSE CHARACTERISTICS

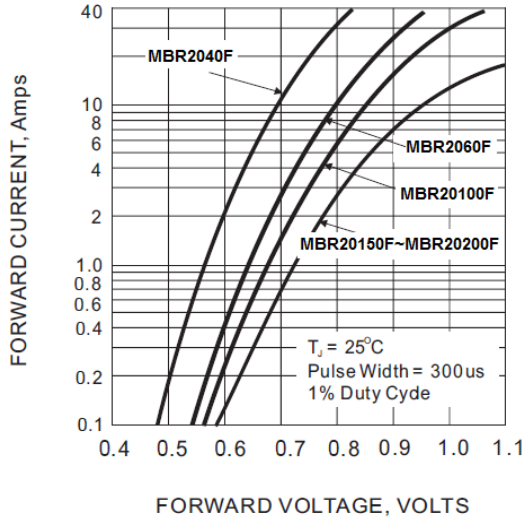

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS