SENSITRON

SEMICONDUCTOR

MBR2080/90/100CT-G MBRB2080/90/100CT-G MBR2080/90/100CT-1-G

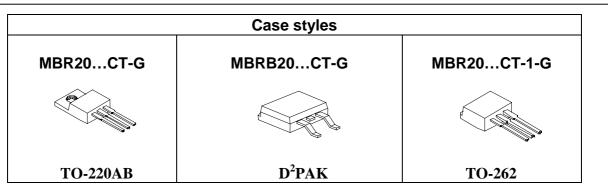
Technical Data Data Sheet 3468, Rev. D **Green Products**

MBR20...CT-G/MBRB20...CT-G/MBR20...CT-1-G SCHOTTKY RECTIFIER

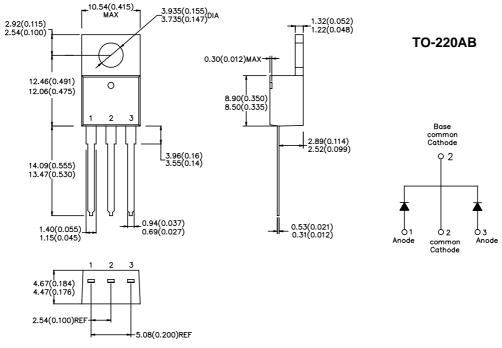
Applications:

• Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection Features:

- 150 °C TJ operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability







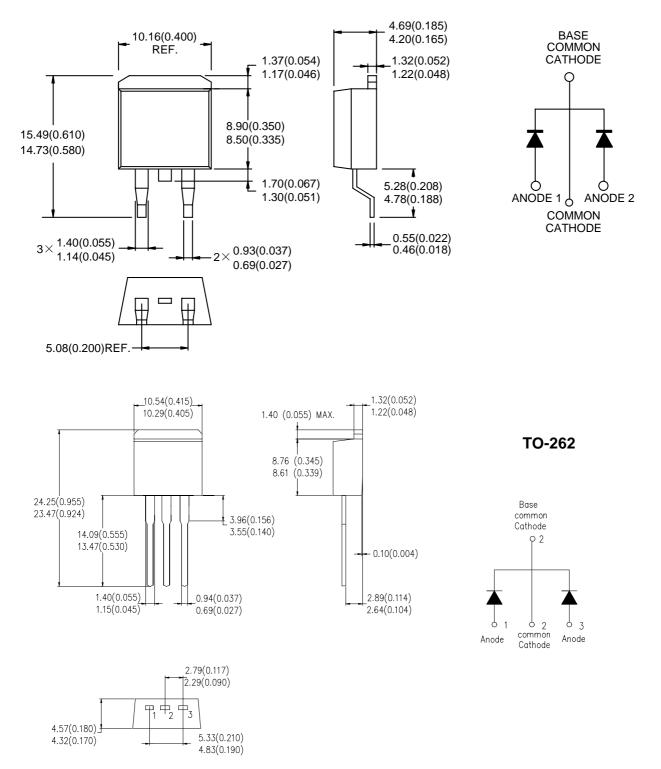
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Maximum Ratings:

Characteristics	Symbol	Condition		Max.	U ni ts
Peak Inverse Voltage	V _{RWM}	-	80	MBR2080CT-G MBRB2080CT-G MBR2080CT-1-G	V
			90	MBR2090CT-G MBRB2090CT-G MBR2090CT-1-G	
			100	MBR20100CT-G MBRB20100CT-G MBR20100CT-1-G	
Max. Average Forward	I _{F(AV)}	50% duty cycle @T _C =133℃, rectangular wave form	10(Per leg) 20(Per device)		A
Max. Peak One Cycle Non- Repetitive Surge Current (per leg)	I _{FSM}	8.3 ms, half Sine pulse	150		А
Peak Repetitive Reverse Surge Current (per leg)	I _{RRM}	2.0μs,1.0KHz	0.5		A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V _{F1}	@ 10A, Pulse, T _J = 25 ℃	0.85	V
(per leg)*		@ 20 A, Pulse, T _J = 25 $^\circ C$	0.95	
	V_{F2}	@ 10 A, Pulse, T _J = 125 $^\circ \mathbb{C}$	0.75	V
		@ 20 A, Pulse, T _J = 125 $^\circ \!$	0.85	
Max. Reverse Current	I _{R1}	$@V_R = rated V_R$	1.00	mA
(per leg)*		T _J = 25 ℃		
	I _{R2}	$@V_{R} = rated V_{R}$	6.0	mA
		T _J = 125 ℃		
Max. Voltage Rate of Change	dv/dt	-	10,000	V/μs

* Pulse Width < 300µs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units	
Max. Junction Temperature	TJ	-	-55 to +150	°C	
Max. Storage Temperature	T _{stg}	-	-55 to +150	°C	
Maximum Thermal Resistance Junction to Case (per leg)	R _{θJC}	DC operation	2.0	°C/W	
Approximate Weight	wt	-	1.9	g	
Mounting Torque	Τ _M	-	6(Min.) 12(Max.)	Kg-cm	
Case Style	TO-220AB D ² PAK TO-262				

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