

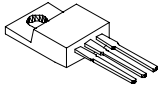
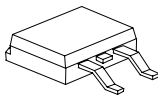
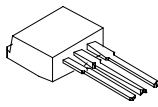
MBR20...CT-G/MBRB20...CT-G/MBR20...CT-1-G
SCHOTTKY RECTIFIER

Applications:

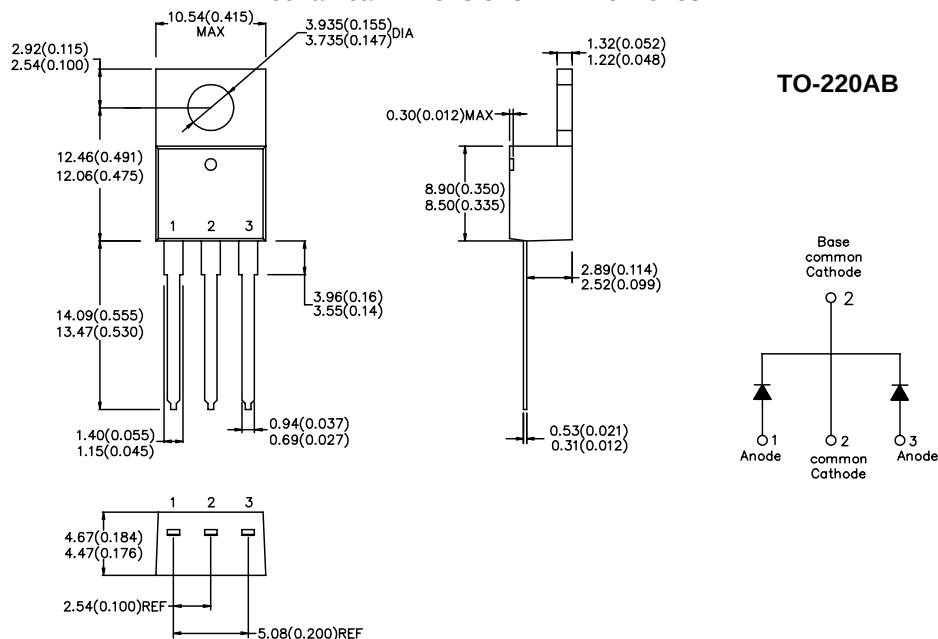
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

Features:

- 150 °C T_J 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

Case styles		
MBR20...CT-G  TO-220AB	MBRB20...CT-G  D²PAK	MBR20...CT-1-G  TO-262

Mechanical Dimensions: In mm/ inches



- 221 West Industry Court ■ Deer Park, NY 11729-4681 ■ (631) 586-7600 FAX (631) 242-9798 •
- World Wide Web Site - <http://www.sensitron.com> • E-Mail Address - sales@sensitron.com •

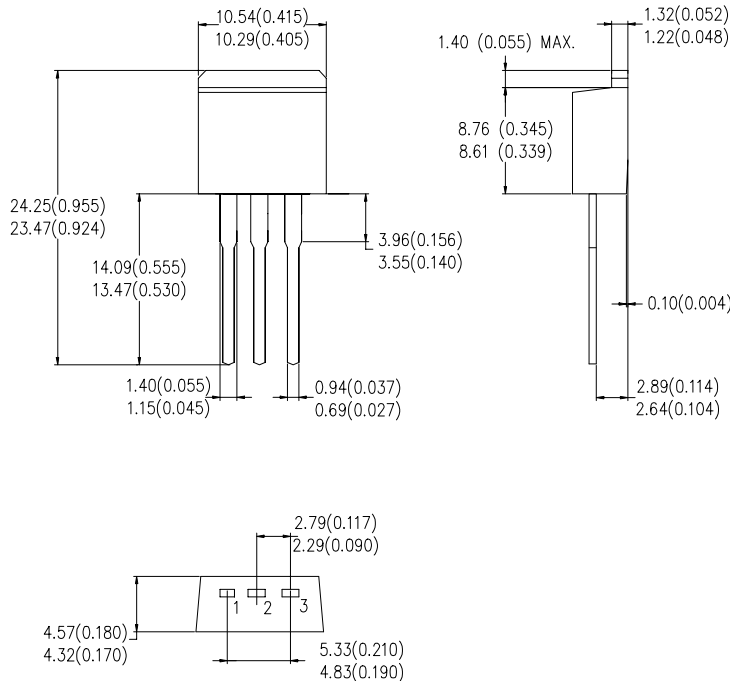
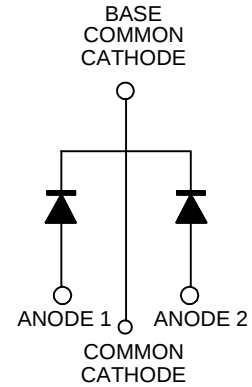
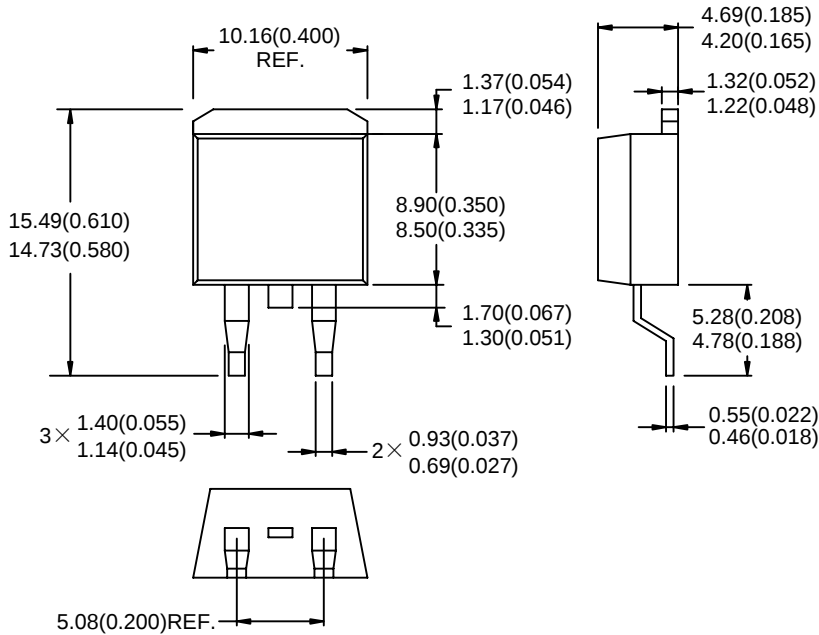
SENSITRON
SEMICONDUCTOR

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

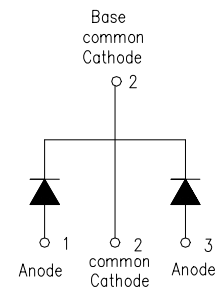
Technical Data
Data Sheet 3468, Rev. D

Green Products

D²PAK



TO-262



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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	80 90 100	V
			MBR2080CT-G MBRB2080CT-G MBR2080CT-1-G	
			MBR2090CT-G MBRB2090CT-G MBR2090CT-1-G	
			MBR20100CT-G MBRB20100CT-G MBR20100CT-1-G	
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @ $T_C = 133^\circ\text{C}$, 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	A
Peak Repetitive Reverse Surge Current (per leg)	I_{RRM}	2.0 μs , 1.0KHz	0.5	A

Electrical Characteristics:

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

* Pulse Width < 300 μs , Duty Cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case (per leg)	$R_{\theta JC}$	DC operation	2.0	$^\circ\text{C/W}$
Approximate Weight	wt	-	1.9	g
Mounting Torque	T_M	-	6(Min.) 12(Max.)	Kg-cm
Case Style	TO-220AB D ² PAK TO-262			

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