

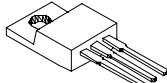
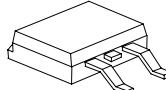
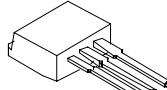
## **MBR20...CT-G/MBRB20...CT-G/MBR20...CT-1-G** **SCHOTTKY RECTIFIER**

### **Applications:**

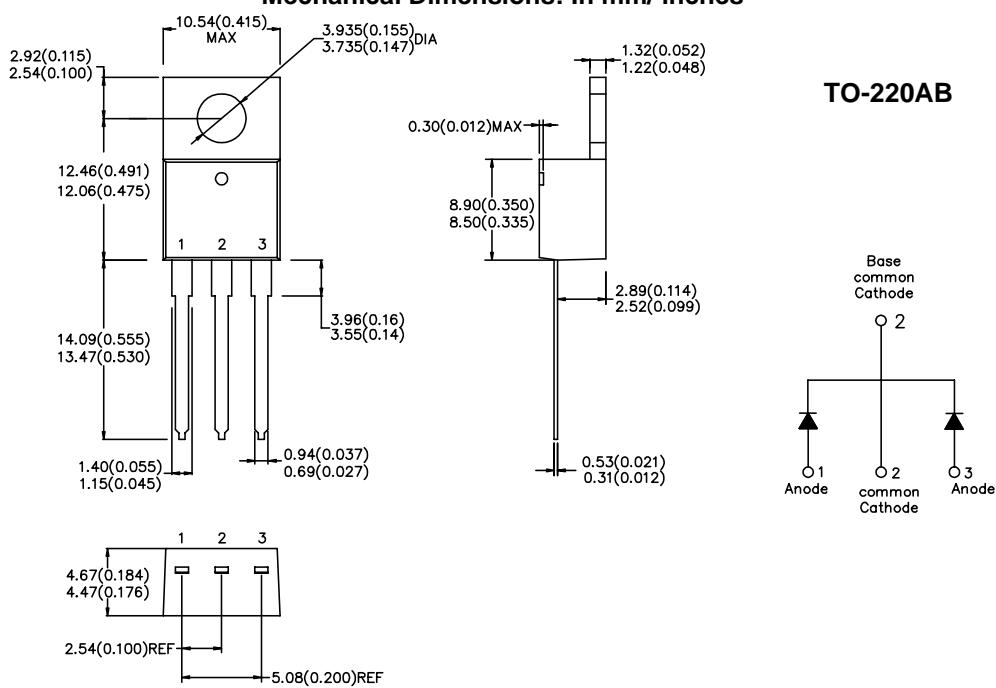
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

### **Features:**

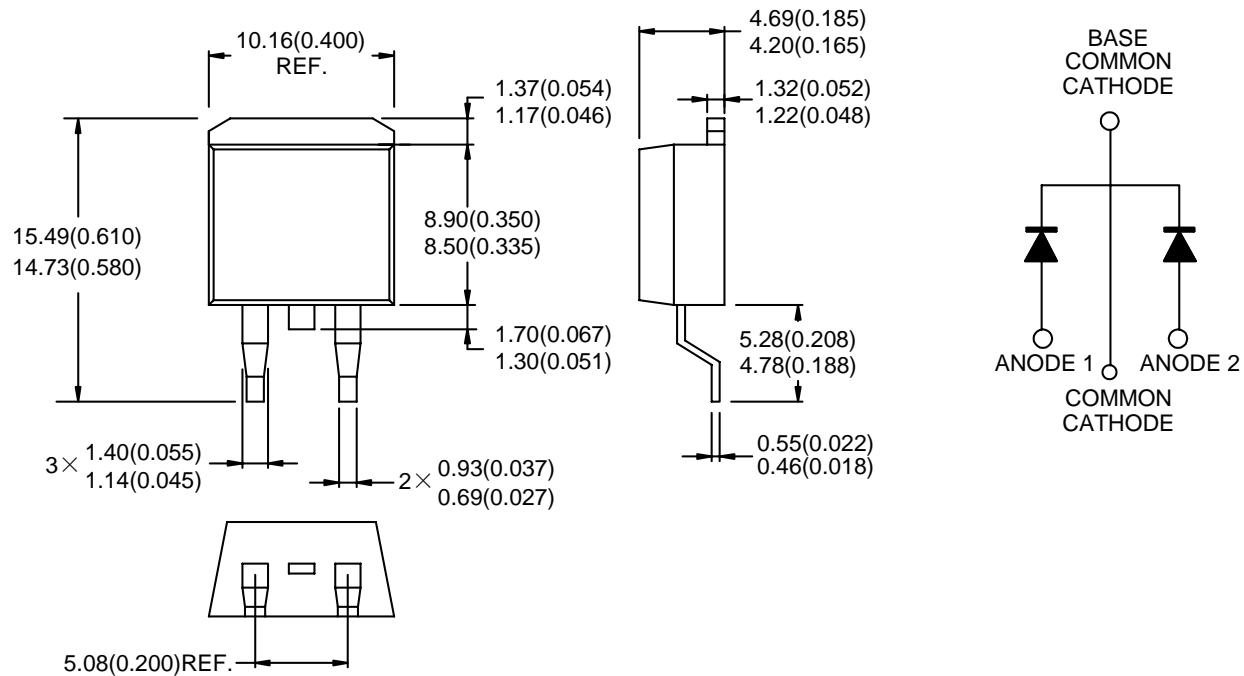
- 150 °C T<sub>J</sub> operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Case styles		
<b>MBR20...CT-G</b>  <b>TO-220AB</b>	<b>MBRB20...CT-G</b>  <b>D<sup>2</sup>PAK</b>	<b>MBR20...CT-1-G</b>  <b>TO-262</b>

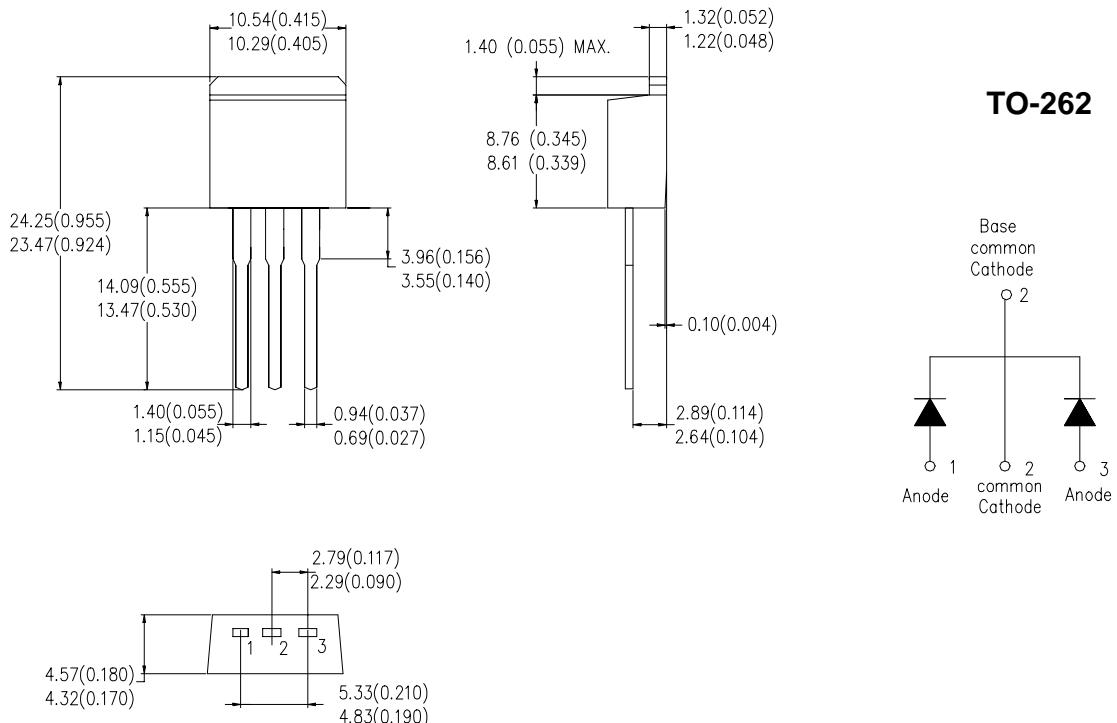
### **Mechanical Dimensions: In mm/ inches**



**D<sup>2</sup>PAK**



**TO-262**



Technical Data  
Data Sheet 3468, Rev. D

*Green Products*

**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.		Units
Peak Inverse Voltage	V <sub>RWM</sub>	-	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 <sub>F(AV)</sub>	50% duty cycle @T <sub>C</sub> =133°C, rectangular wave form	10(Per leg)		A
			20(Per device)		
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I <sub>FSM</sub>	8.3 ms, half Sine pulse	150		A
Peak Repetitive Reverse Surge Current (per leg)	I <sub>RRM</sub>	2.0μs, 1.0KHz	0.5		A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (per leg)*	V <sub>F1</sub>	@ 10A, Pulse, T <sub>J</sub> = 25 °C @ 20 A, Pulse, T <sub>J</sub> = 25 °C	0.85 0.95	V
	V <sub>F2</sub>	@ 10 A, Pulse, T <sub>J</sub> = 125 °C @ 20 A, Pulse, T <sub>J</sub> = 125 °C	0.75 0.85	V
Max. Reverse Current (per leg)*	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub> T <sub>J</sub> = 25 °C	1.00	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> T <sub>J</sub> = 125 °C	6.0	mA
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	T <sub>J</sub>	-	-55 to +150	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case (per leg)	R <sub>θJC</sub>	DC operation	2.0	°C/W
Approximate Weight	wt	-	1.9	g
Mounting Torque	T <sub>M</sub>	-	6(Min.) 12(Max.)	Kg-cm
Case Style	TO-220AB D <sup>2</sup> PAK TO-262			

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