

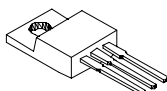
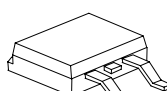
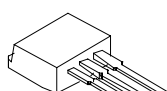
## MBR20...CT-G/MBRB20...CT-G/MBR20...CT-1-G SCHOTTKY RECTIFIER

### Applications:

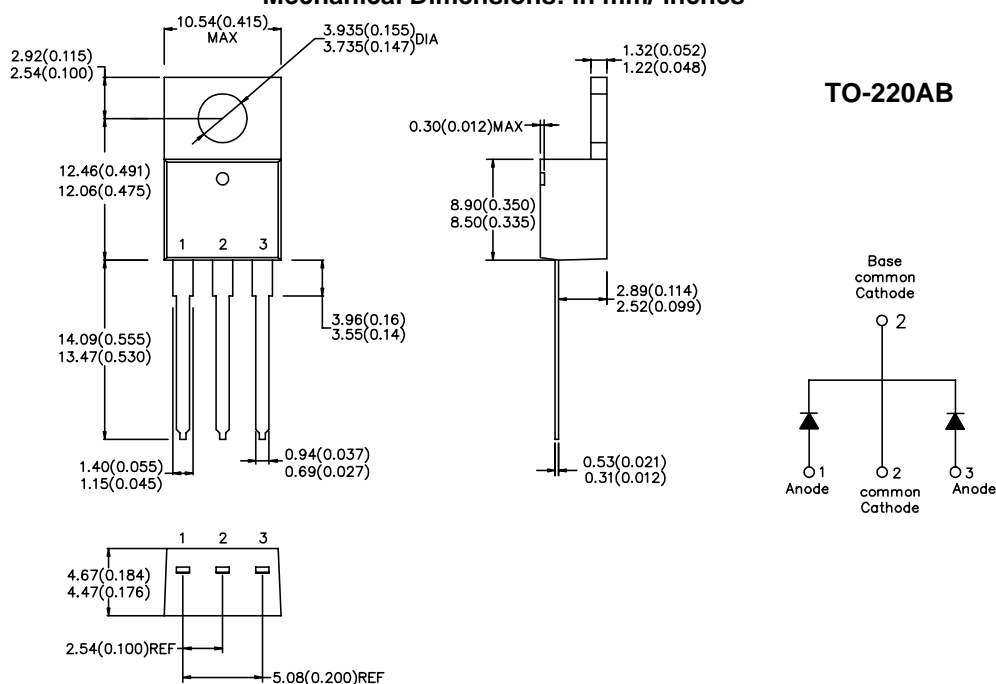
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

### Features:

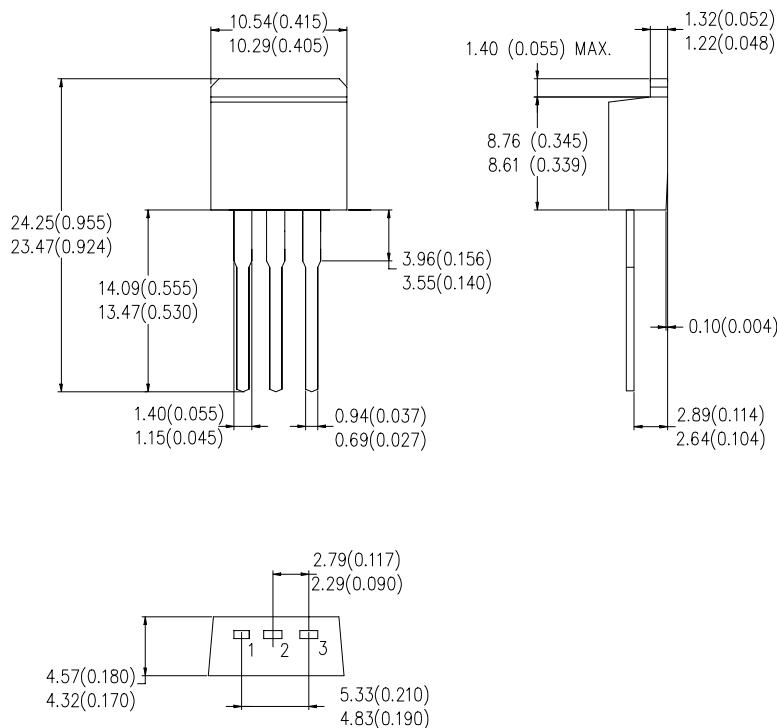
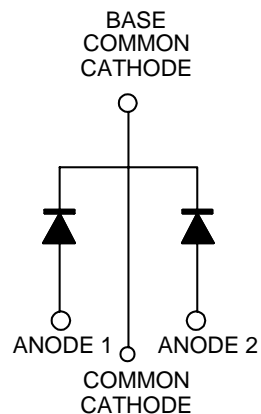
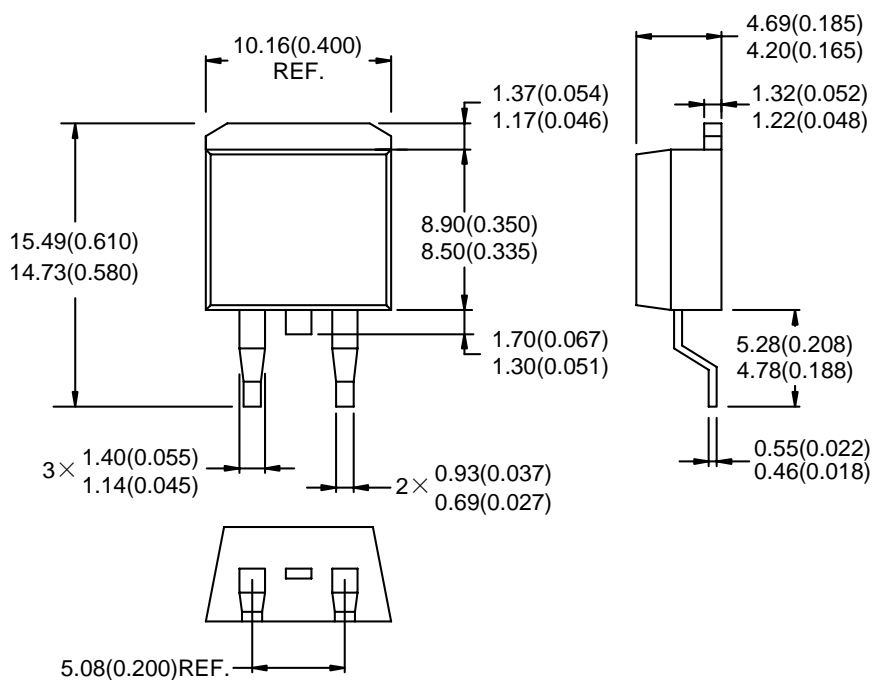
- 150 °C T<sub>J</sub> operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Case styles		
<b>MBR20...CT-G</b>  <b>TO-220AB</b>	<b>MBRB20...CT-G</b>  <b>D²PAK</b>	<b>MBR20...CT-1-G</b>  <b>TO-262</b>

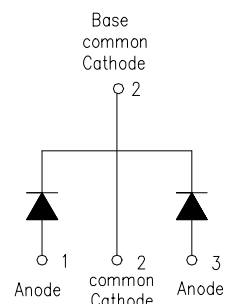
### Mechanical Dimensions: In mm/ inches



**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	$V_{RWM}$	-	80	MBR2080CT-G MBRB2080CT-G MBR2080CT-1-G
			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 @ $T_C = 133^\circ\text{C}$ , 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 $\mu\text{s}$ , 1.0KHz	0.5	A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (per leg)*	$V_{F1}$	@ 10A, Pulse, $T_J = 25^\circ\text{C}$ @ 20 A, Pulse, $T_J = 25^\circ\text{C}$	0.85 0.95	V
	$V_{F2}$	@ 10 A, Pulse, $T_J = 125^\circ\text{C}$ @ 20 A, Pulse, $T_J = 125^\circ\text{C}$	0.75 0.85	V
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/ $\mu\text{s}$

\* Pulse Width < 300 $\mu\text{s}$ , 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 <sup>2</sup> PAK TO-262			

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