

Technical Data  
Data Sheet M2687, Rev. -

*Green Products*

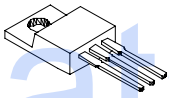
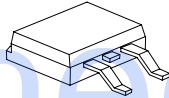
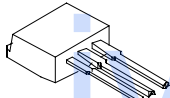
**MBR2560CT-G/MBRB2560CT-G/MBR2560CT-1-G**  
**SCHOTTKY RECTIFIER**

**Applications:**

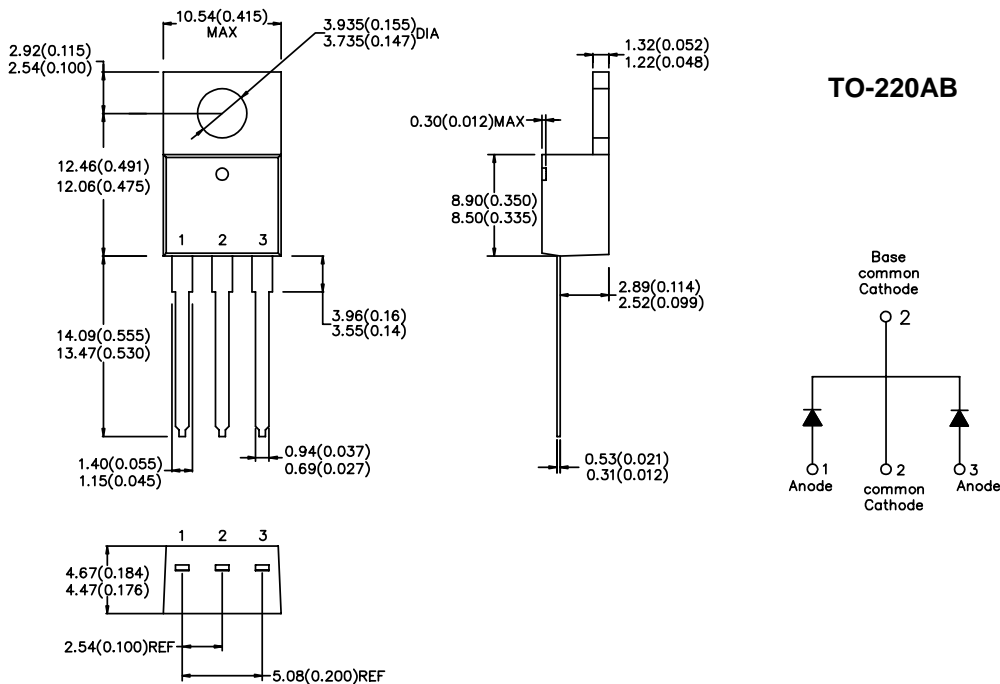
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

**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>MBR2560CT-G</b>	<b>MBRB2560CT-G</b>	<b>MBR2560CT-1-G</b>
		
<b>TO-220AB</b>	<b>D<sup>2</sup>PAK</b>	<b>TO-262</b>

Mechanical Dimensions: In Inches / mm

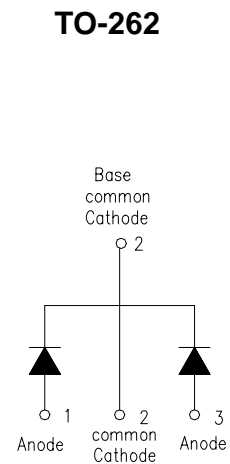
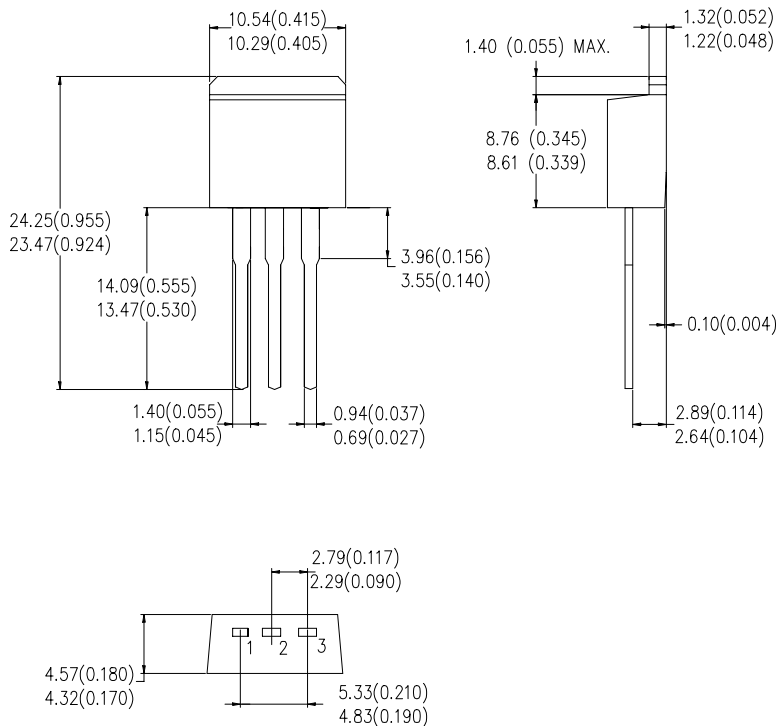
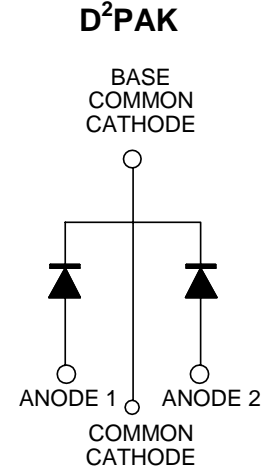
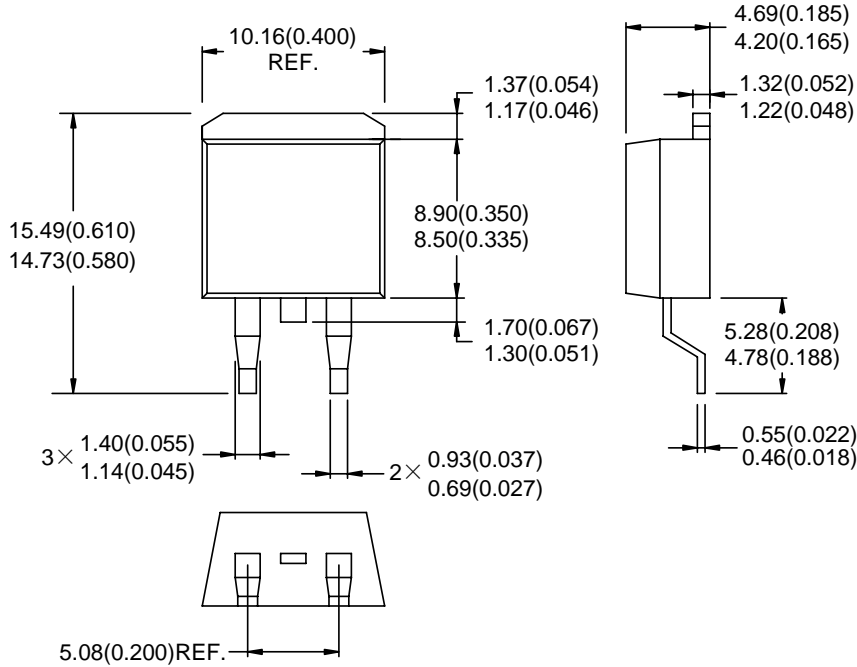


**SENSITRON**  
**SEMICONDUCTOR**

**MBR2560CT-G**  
**MBRB2560CT-G**  
**MBR2560CT-1-G**

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**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	60	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @ $T_C = 130^\circ\text{C}$ , rectangular wave form	30	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	$I_{FSM}$	8.3 ms, half Sine pulse	150	A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (per leg) *	$V_{F1}$	@ 15A, Pulse, $T_J = 25^\circ\text{C}$ @ 30A, Pulse, $T_J = 25^\circ\text{C}$	0.75 -	V
	$V_{F2}$	@ 15A, Pulse, $T_J = 125^\circ\text{C}$ @ 30A, Pulse, $T_J = 125^\circ\text{C}$	0.65 -	V
Max. Reverse Current (per leg) *	$I_{R1}$	@ $V_R = \text{rated } V_R$ $T_J = 25^\circ\text{C}$	1.0	mA
	$I_{R2}$	@ $V_R = \text{rated } V_R$ $T_J = 125^\circ\text{C}$	50	mA
Max. Voltage Rate of Change	dv/dt	-	10,000	V/ $\mu\text{s}$
RSM Isolation Voltage ( $t=1.0\text{second}$ , R.H. $\leq 30\%$ , $T_A=25\%$ )	$V_{ISO}$	Clip mounting, the epoxy body away from the heatsink edge by more than 0.110" along the lead direction	4500	V
		Clip mounting, the epoxy body is inside the heatsink.	3500	
		Screw mounting, the epoxy body is inside the heatsink	1500	

\* 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	$R_{\theta JC}$	DC operation	3.5	$^\circ\text{C/W}$
Approximate Weight	wt	-	2.0	g
Mounting Torque	$T_M$	-	6(Min.) 12(Max.)	Kg-cm
Case Style	TO-220AB D <sup>2</sup> PAK TO-262(Suffix"-1"forTO-262"MBRbx" for D <sup>2</sup> PAK)			

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