

Technical Data
Data Sheet M2687, Rev. -

Green Products

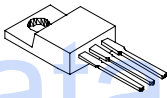
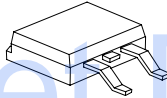
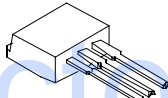
MBR2560CT-G/MBRB2560CT-G/MBR2560CT-1-G
SCHOTTKY RECTIFIER

Applications:

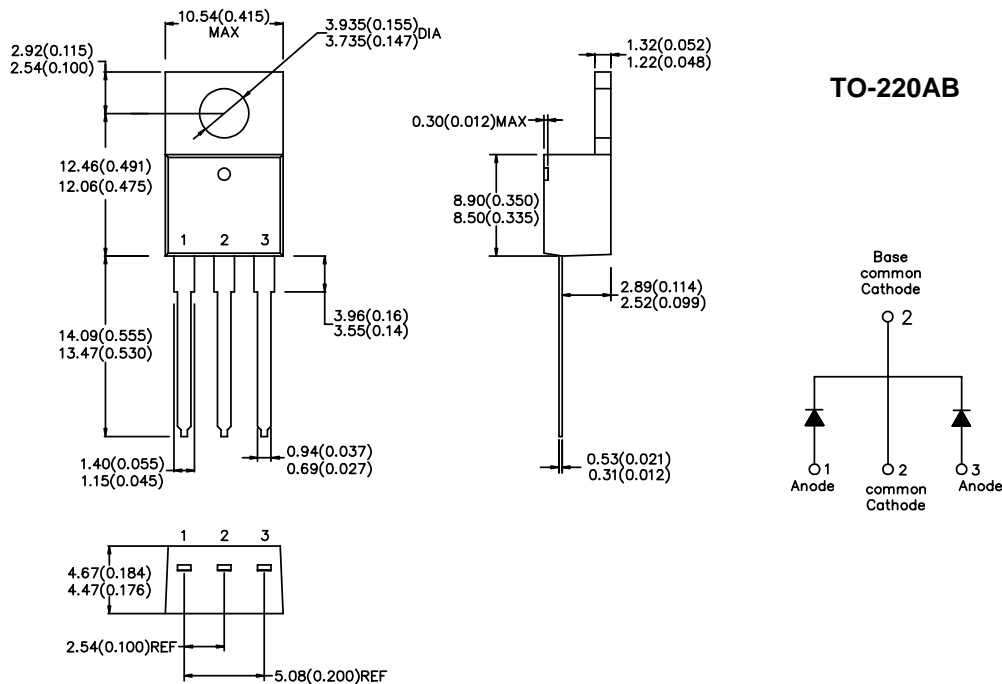
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

Features:

- 150 °C T_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		
MBR2560CT-G	MBRB2560CT-G	MBR2560CT-1-G
		
TO-220AB	D²PAK	TO-262

Mechanical Dimensions: In Inches / mm

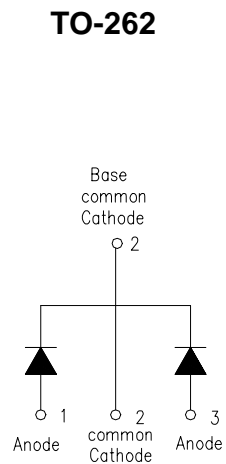
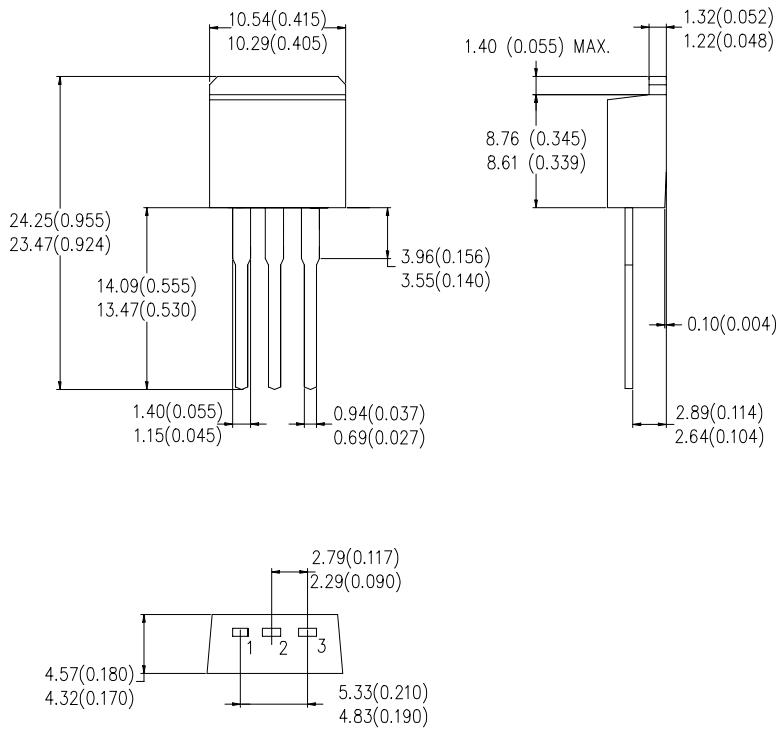
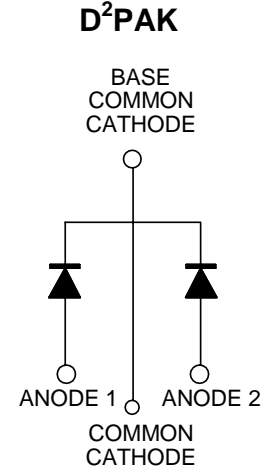
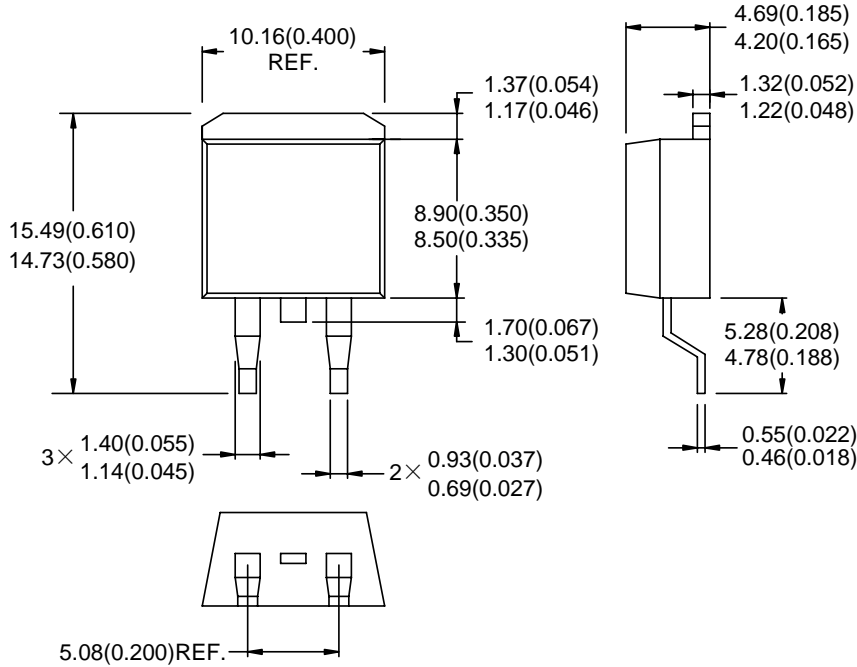


SENSITRON
SEMICONDUCTOR

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/ μs
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 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	$R_{\theta JC}$	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 ² PAK TO-262(Suffix"-1"forTO-262"MBRBx" for D ² PAK)			

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