

MBRD560-MBRD5200 SCHOTTKY RECTIFIER

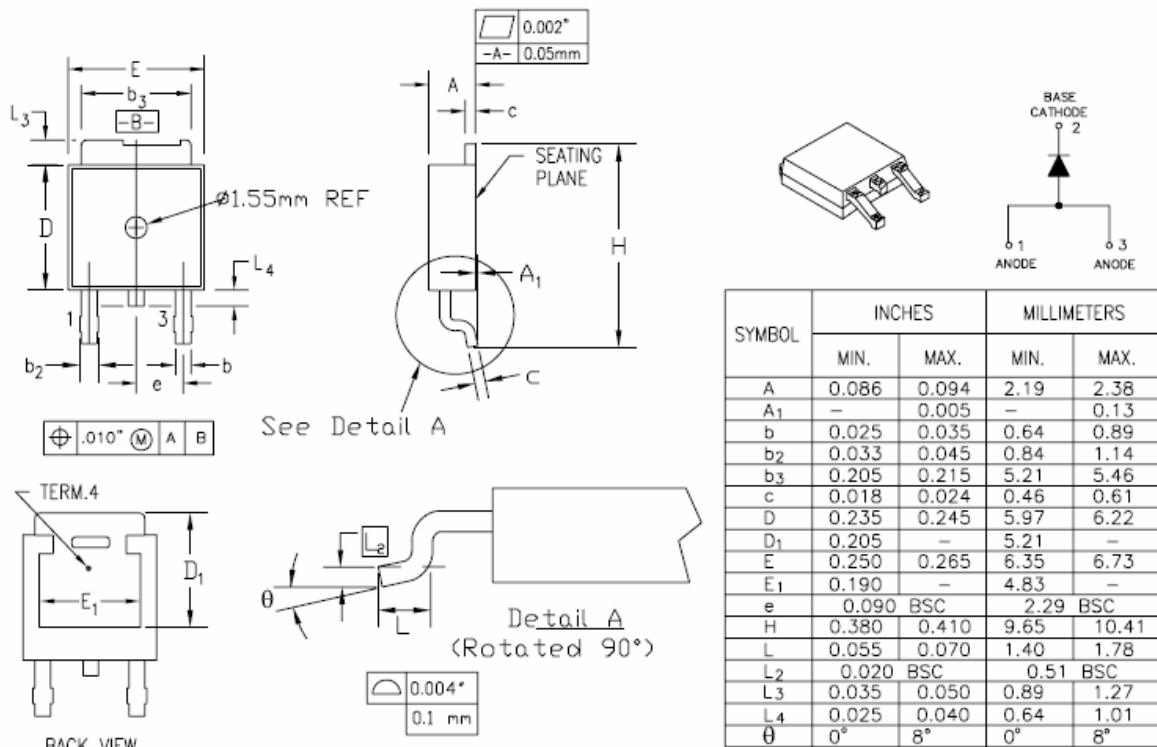
Applications:

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

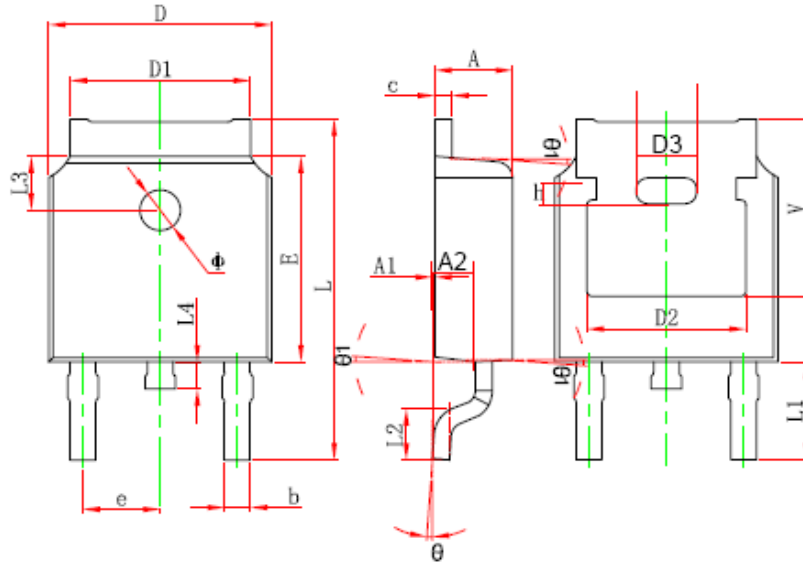
Features:

- 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
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

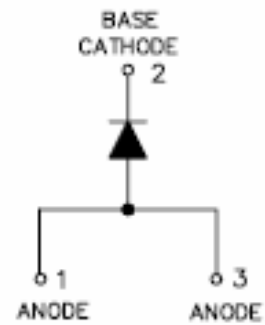
Mechanical Dimensions: In Inches / mm



OPTION 1(MX)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
A2	0.910	1.110	0.036	0.044
V	5.350 REF.		0.211 REF.	
D3	1.778REF.		0.070REF.	
h	0.762REF.		0.030REF.	
θ1	7°		7°	



OPTION 2(CJ)

DPAK



Marking Diagram:



Where XXXXX is YYWWL

MBR = Device Type
D = Package type
5 = Forward Current (5A)
60 = Reverse Voltage (60V)
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
MBRD560	DPAK (Pb-Free)	2500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

Characteristics	Symbol	560	580	5100	5150	5200	Units
Peak Inverse Voltage	V_{RWM}	60	80	100	150	200	V
Max. Average Forward	$I_{F(AV)}$	5					A
Max. Peak One Cycle Non-Repetitive Surge Current (8.3ms Single half sine-wave)	I_{FSM}	120					A
Max. Forward Voltage Drop @5A, 25°C	V_F	0.65	0.75	0.85	0.90	0.92	V
Max. Reverse Current @ V_{RWM} , 25°C	I_R	1					mA
Max. Junction Capacitance(Note1)	C_T	300			150		pF
Max. Junction Temperature	T_J	-55 to +150					°C
Max. Storage Temperature	T_{stg}	-55 to +150					°C
Maximum Thermal Resistance Junction to Case (DC operation)	$R_{\theta JC}$	6.0					°C/W
Approximate Weight	wt	0.39					g
Case Style		DPAK					

* Pulse Width < 300 μ s, Duty Cycle <2%

Note1: Measured at 1.0 MHz and applied reverse voltage of 5.0V D.C.



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