

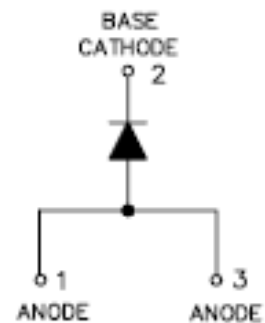
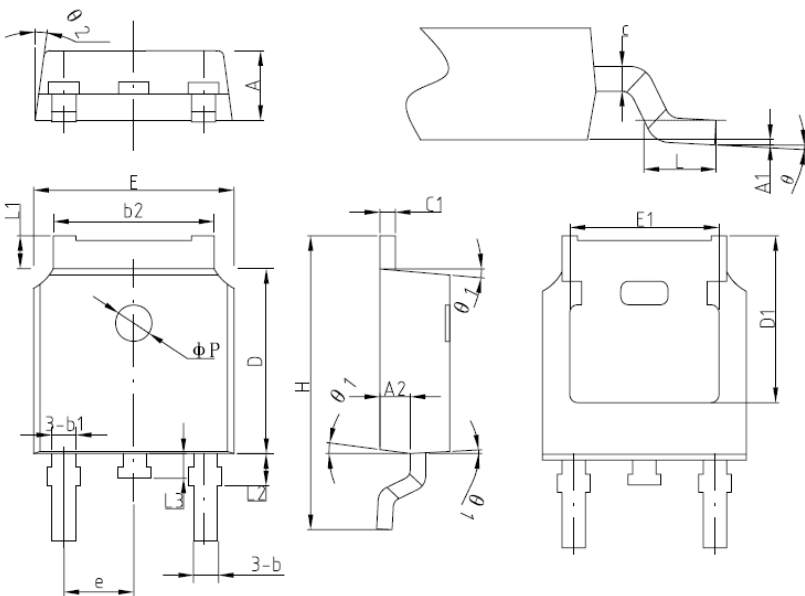
MBRD560-MBRD5200 SCHOTTKY RECTIFIER

Applications:

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

Features:

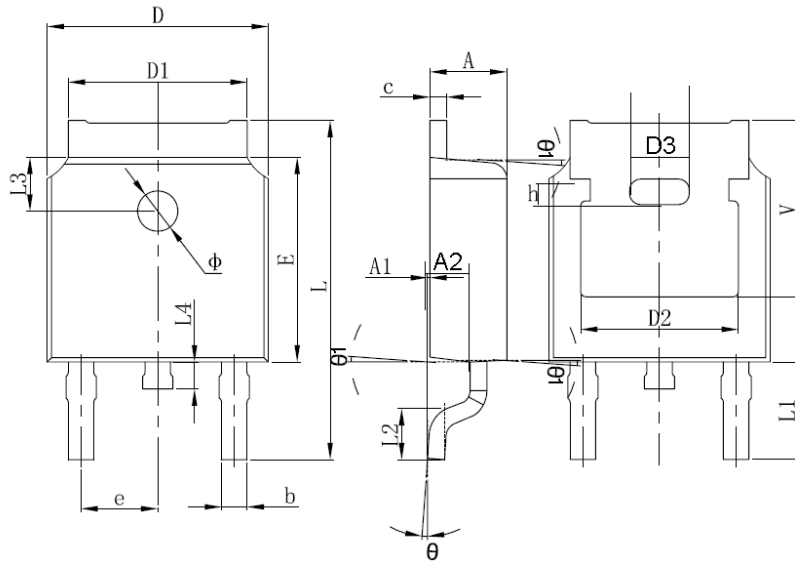
- 150 °C T_J operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request


Mechanical Dimensions: In Inches / mm


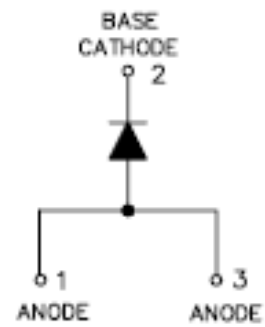
SYMBOL	MIN.	TYP.	MAX.
A	2.20	2.30	2.38
A1	0	-	0.10
A2	0.90	1.01	1.10
b	0.71	0.76	0.86
b1		0.76	
b2	5.13	5.33	5.46
c	0.47	0.50	0.60
c1	0.47	0.50	0.60
D	6.0	6.10	6.20
D1	-	5.30	-
E	6.50	6.60	6.70
E1	-	4.80	-
e	2.286BSC		
H	9.70	10.10	10.40
L	1.40	1.50	1.70
L1	0.90	-	1.25
L2		1.05	
L3		0.8	
ΦP		1.2	
Θ	0°	-	8°
Θ1	5°	7°	9°
Θ2	5°	7°	9°

OPTION1 (HD)

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •



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	1.778 REF.		0.070 REF.	
h	0.762 REF.		0.030 REF.	
θ1	7°		7°	



OPTION 2(CJ)

DPAK

Marking Diagram:



First row: Part Number (MBRD560, MBRD580, MBRD5100, MBRD5150, MBRD5200)

Second row: SSG YYWWL

YY is the manufacture year, WW is the manufacture week code, L is the wafer's Lot Number

Ordering Information:

Device	Package	Shipping
MBRD560 MBRD580 MBRD5100 MBRD5150 MBRD5200	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.



MBRD560- MBRD5200

Technical Data
Data Sheet N0801, Rev. -

Green Products

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristics	Symbol	MBRD 560	MBRD 580	MBRD 5100	MBRD 5150	MBRD 5200	Units
Peak Repetitive Reverse Voltage	V _{RRM}						
Working Peak Reverse Voltage	V _{RWM}	60	80	100	150	200	V
DC Blocking Voltage	V _R						
Max. Average Forward Current	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
Typical Thermal Resistance Junction to Case (DC operation)	R _{θJC}	6.0					°C/W
Approximate Weight	wt	0.39					g
Case Style		DPAK					

* Pulse Width < 300μs, Duty Cycle <2%

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



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