

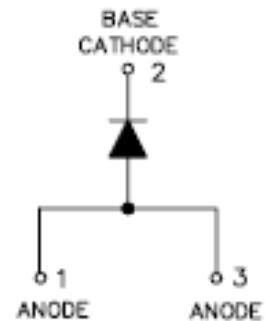
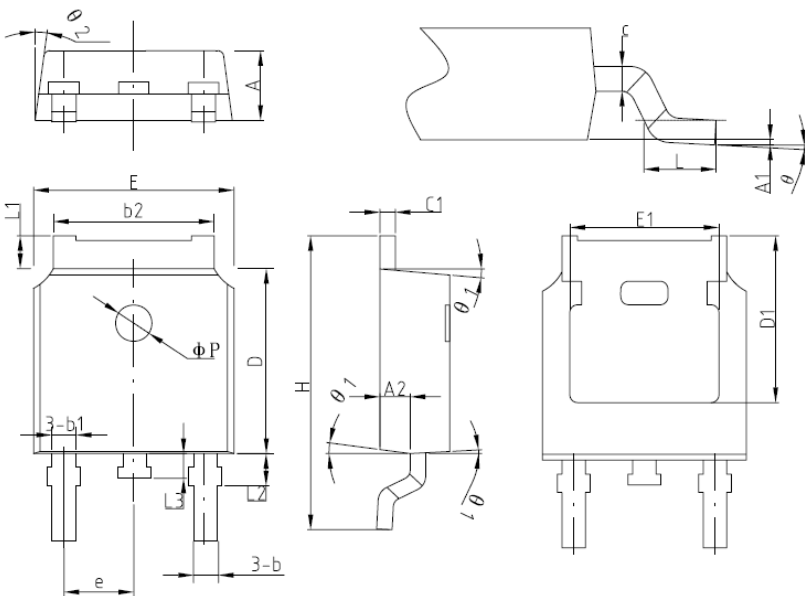
MBRD560-MBRD5200 SCHOTTKY RECTIFIER

Applications:

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

Features:

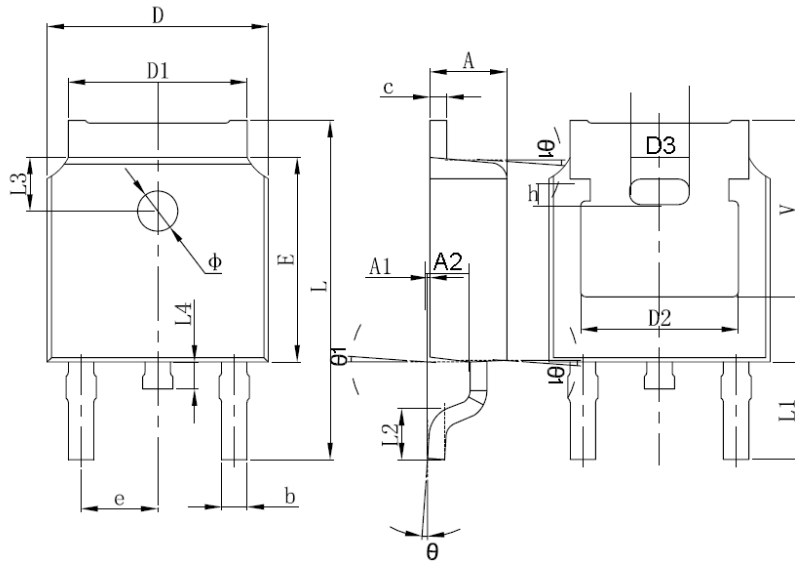
- 150 °C T_J operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb - Free Device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


Mechanical Dimensions: In Inches / mm


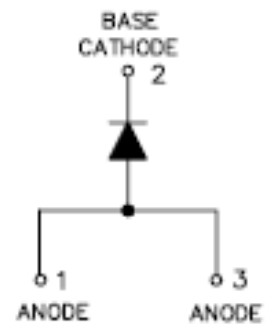
SYMBOL	MIN.	TYP.	MAX.
A	2.20	2.30	2.38
A1	0	-	0.10
A2	0.90	1.01	1.10
b	0.71	0.76	0.86
b1		0.76	
b2	5.13	5.33	5.46
c	0.47	0.50	0.60
c1	0.47	0.50	0.60
D	6.0	6.10	6.20
D1	-	5.30	-
E	6.50	6.60	6.70
E1	-	4.80	-
e	2.286BSC		
H	9.70	10.10	10.40
L	1.40	1.50	1.70
L1	0.90	-	1.25
L2		1.05	
L3		0.8	
ΦP		1.2	
Θ	0°	-	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 Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	60	80	100	150	200	V
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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