MBRD360
THRU
MBRD3200

Technical Data
Data Sheet N0798, Rev. -

Green Products

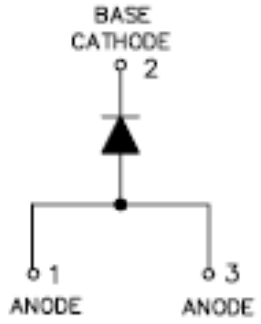
MBRD360 THRU MBRD3200
SCHOTTKY RECTIFIER

Applications:

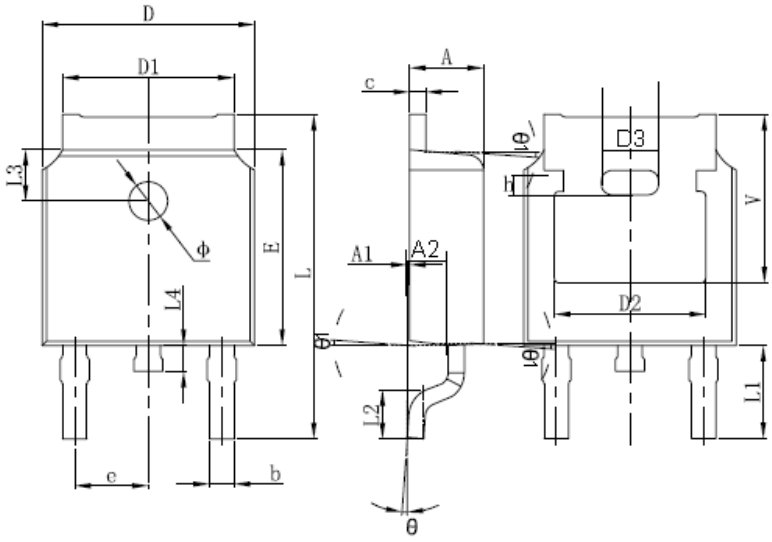
- **Switching power supply**
- **Converters**
- **Free-Wheeling diodes**
- **Reverse battery protection**

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 mm/Inches



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A10.000	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 1(CJ)

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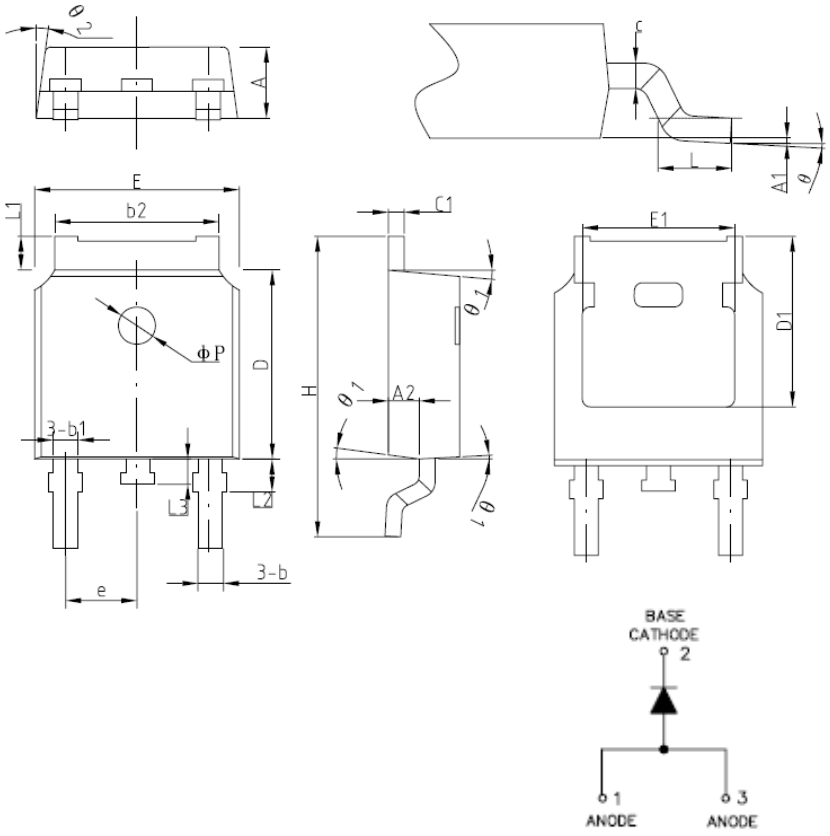

SYMBOL	MIN.	TYP.	MAX.
A	2.20	2.30	2.38
A1	0	-	0.10
A2	0.90	1.01	1.10
b	0.71	0.76	0.86
b1		0.76	
b2	5.13	5.33	5.46
c	0.47	0.50	0.60
c1	0.47	0.50	0.60
D	6.0	6.10	6.20
D1	-	5.30	-
E	6.50	6.60	6.70
E1	-	4.80	-
e		2.286BSC	
H	9.70	10.10	10.40
L	1.40	1.50	1.70
L1	0.90	-	1.25
L2		1.05	
L3		0.8	
ΦP		1.2	
Θ	0°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

OPTION 2(HD)

DPAK

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Marking Diagram:

First row: Part Number (MBRD360, MBRD380, MBRD3100, MBRD3150, MBRD3200)
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
MBRD360 MBRD380 MBRD3100 MBRD3150 MBRD3200	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.

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

Characteristics	Symbol	MBRD 360	MBRD 380	MBRD 3100	MBRD 3150	MBRD 3200	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	80	100	150	200	V
Average Forward Current	$I_{F(AV)}$	3					A
Max. Peak One Cycle Non-Repetitive Surge Current(8.3ms Single half sine-wave)	I_{FSM}	80					A
Max. Forward Voltage Drop* @3A, 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	250			100		pF
Junction Temperature	T_J	-55 to +150					°C
Storage Temperature	T_{stg}	-55 to +150					°C
Typical 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 < 300μs, Duty Cycle <2%
Note1: Measured at 1.0 MHz and applied reverse voltage of 5.0V D.C.

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