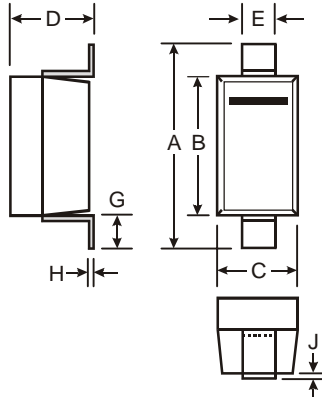
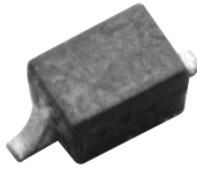


0.4 amp Schottky Low Forward Voltage Rectifier: B0520WS -- First SOD-323 Rectifier Product!



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.60	1.80
C	1.20	1.40
D	1.05 Typical	
E	0.25	0.35
G	0.20	0.40
H	0.10	0.15
J	0.05 Typical	
All Dimensions in mm		

Key Features

- ❑ Very low forward voltage drop (V_F):
 - $V_{F(MAX)}$ @ $I_F = 0.5A$: 400mV
 - $V_{F(MAX)}$ @ $I_F = 0.1A$: 300mV
- ❑ High average rectified current rating for a SOD-323 device (I_O): 400mA.

Benefits

1. Low power loss / highly efficient.
2. Can operate at very high frequencies / conducive to switch-mode circuits.
3. Very small package allows for greater circuit density and reduced PCB area consumption.

End Equipment Applications

Computer Motherboard, Portable Applications, and Handheld Devices:

- ❑ PWM Controller circuit in motherboard
- ❑ Low ripple 5V to -3V "Cuk" Converter
- ❑ 5V to 3.3VDC, 4 Amp Synchronous Step-Down Power Supply Controller
- ❑ Low Voltage Micro to Motor Interface

Can be used for clamping, protection, and detection

Availability

- ❑ Samples *Now Available*
- ❑ Production Quantities stock to 4-6 weeks
- ❑ Data Sheet available NOW at: <http://www.diodes.com/datasheets/ds30235.pdf>

Crosses to Other Manufacturers' Parts

- Near equivalent to:
 - Rohm RB551V-30
 - Central Semi CMDSH2-3
 - Infineon BAT60B

Ways B0520WS Surpasses Its Competition

- Rohm RB551V-30
 - Our B0520WS offers lower forward voltage drop for more efficient forward operation.
 - On battery-powered devices, such as PDAs, cell phones, and notebook computers, this could equate to longer battery life.

- Central Semi CMDSH2-3
 - Our B0520WS offers lower forward voltage drop for more efficient forward operation.
 - On battery-powered devices, such as PDAs, cell phones, and notebook computers, this could equate to longer battery life.
 - Our B0520WS offers a higher forward surge current rating. This could result in our part reliably withstanding strong over-current transient conditions which can occur during unexpected short-duration short-circuit conditions.

- Infineon BAT60B
 - Higher BV_R may allow customer to use our B0520WS in some higher voltage applications, where they cannot use Infineon.
 - Lower I_R may equate to less power consumption and/or longer battery life in some applications.