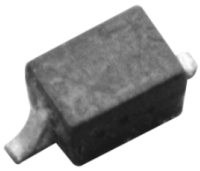
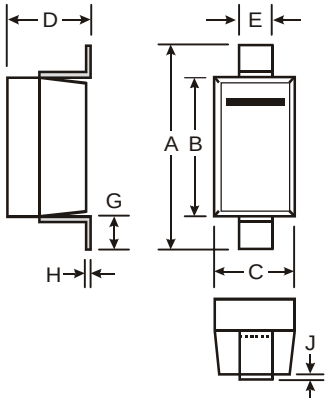
DIODES INCORPORATED

New Product Announcement
May 2001

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**

For more information, contact the Sales Department at
Diodes Incorporated Tel (805) 446-4800 / Fax (805) 446-4850 **www.diodes.com**

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.