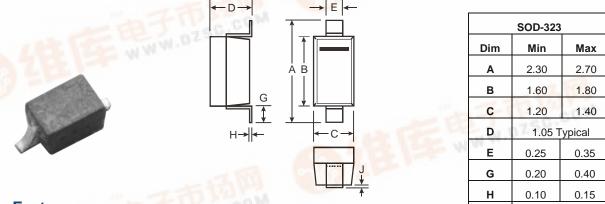


0.4 amp Schottky Low Forward Voltage Rectifier: B0520WS -- First SOD-323 Rectifier Product!



0.05 Typical

All Dimensions in mm

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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 (I₀): 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:

- Dev 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: <u>http://www.diodes.com/datasheets/ds30235.pdf</u>



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:
 - o Rohm RB551V-30
 - o Central Semi CMDSH2-3
 - o Infineon BAT60B

Ways B0520WS Surpasses Its Competition

- □ Rohm RB551V-30
 - o 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
 - o 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.
 - $\circ~$ Lower I_{R} may equate to less power consumption and/or longer battery life in some applications.