

# Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company





# SILICON EPITAXIAL SWITCHING DIODE

**BAS216WS** 

SOD-323 PLASTIC PCAKAGE



This product is available in AEC-Q101 Compliant also.

NOTE: For AEC-Q101 compliant products, please use suffix -AQ in the part number while ordering Marking

BAS216WS=W2 with cathode band

### ABSOLUTE MAXIMUM RATINGS (T<sub>2</sub>=25°C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V
Reverse Voltage	$V_{R}$	75	V
Continuous Forward Current	I <sub>F</sub>	250	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	500	mA
Non Repetitive Peak Forward Surge Current	I <sub>FSM</sub>		
at t=1s		0.5	А
at t=1ms		1.0	А
at t=1 <b>ms</b>		4.0	А
Power Dissipation	P <sub>tot</sub>	200	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to +150	°C

# **ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise)**

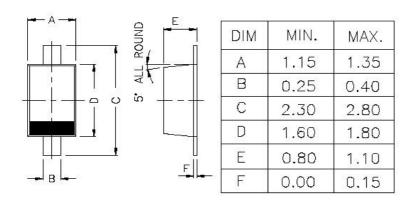
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	$V_{F}$	I <sub>F</sub> =1mA		0.715	V
		I <sub>F</sub> =10mA		0.855	V
		I <sub>F</sub> =50mA		1.0	V
		I <sub>F</sub> =150mA		1.25	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =25V		30	nA
		V <sub>R</sub> =75V		1.0	μΑ
		$V_R = 25V, T_j = 150^{\circ}C$		30	μΑ
		V <sub>R</sub> =75V, T <sub>j</sub> =150°C		50	μΑ

#### **DYNAMIC CHARACTERISTICS**

Diode Capacitance	$C_{tot}$	V <sub>R</sub> =0V, f=1MHz	1.5	pF
		$I_F=10mA$ , to $I_R=10mA$		
Reverse Recovery Time	t <sub>rr</sub>	$R_L$ =100 $\Omega$	4.0	ns
		Measured at I <sub>R</sub> =1mA		

#### BAS216WS Rev010410E

# PACKAGE SOD-323 FL



All dimensions are in mm

CATHODE IS MARKED BY BAND

# **Component Disposal Instructions**

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
- 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes BAS216WS

SOD-323 PLASTIC PCAKAGE

## **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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