

**SILICON EXPITAXIAL PLANAR SWITCHING DIODE**

**BAS16WS**

**SOD-323  
PLASTIC PACKAGE**



**Marking**

BAS16WS = A6 with cathode band

**Fast Switching Diode**

**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	$V_R$	75	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Forward Current (Continuous)	$I_F$	250	mA
Non Repetitive Peak Forward Current			
$t=1\mu s$	$I_{FSM}$	2.0	A
$t=1ms$	$I_{FSM}$	1.0	A
$t=1s$	$I_{FSM}$	0.5	A
Power Dissipation @ $T_{amb}=25^\circ C$	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	- 65 to 150	$^\circ C$

**THERMAL RESISTANCE**

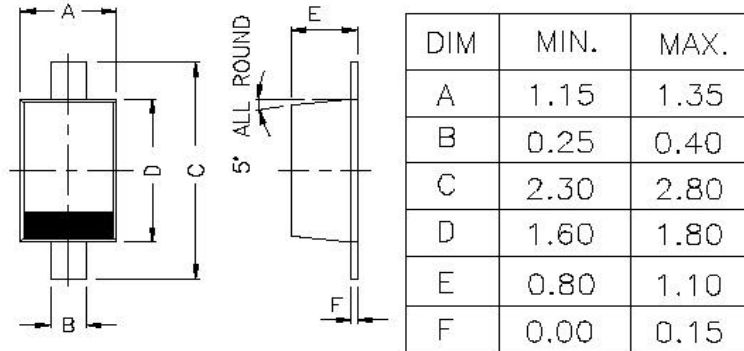
Junction to Ambient in free air	$R_{th(j-a)}$	650	$^\circ C/W$
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**ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ C$  unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward Voltage	$V_F$	$I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$ $I_F = 50\text{ mA}$ $I_F = 150\text{ mA}$			0.715 0.855 1.0 1.25	V V V V
Reverse Voltage Leakage Current	$I_R$	$V_R=25V, T_j=150^\circ C$ $V_R=75V$ $V_R=75V, T_j=150^\circ C$			30 1.0 50	$\mu A$ $\mu A$ $\mu A$
Diode Capacitance	$C_d$	$V_R=0V, f=1MHz$			2.0	pF
Reverse Recovery Time When Switched from	$t_{rr}$	$I_F=10mA$ to $I_R=60mA, R_L 100\ \Omega$ , Measured at $I_R=1mA$			6.0	ns

BAS16WS Rev140604E

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).

### **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 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).

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