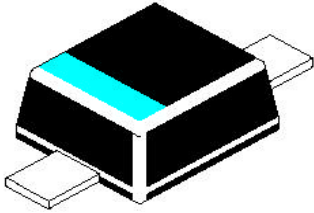


SILICON EXPITAXIAL PLANAR SWITCHING DIODE

BAS516

**SOD-523
PLASTIC PACKAGE**



Marking

BAS516 =A with cathode band

High Speed Switching Diode

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

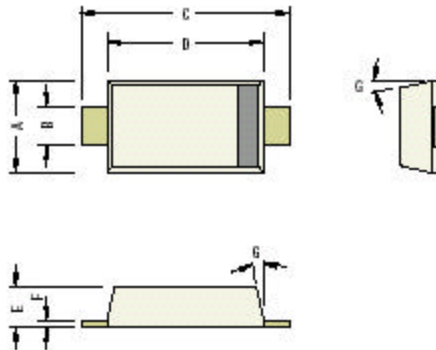
DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V _{RRM}	85	V
Reverse Voltage	V _R	75	V
Continuous Forward Current	I _F	250	mA
Repetitive Peak Forward Current	I _{FRM}	500	mA
Non Repetitive Peak Forward Surge Current	I _{FSM}		
t=1μs		4.0	A
t=1ms		1.0	A
t=1s		0.5	A
Power Dissipation	P _{tot}	150	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	- 65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward Voltage	V _F	I _F = 1 mA			0.715	V
		I _F = 10 mA			0.855	V
		I _F = 50 mA			1.0	V
		I _F = 150 mA			1.25	V
Reverse Current	I _R	V _R =25V			30	nA
		V _R =75V			1.0	μA
		V _R =25V, T _j =150°C			30	μA
		V _R =75V, T _j =150°C			50	μA
Diode Capacitance	C _d	V _R =0V, f=1MHz			1.5	pF
Reverse Recovery Time	t _{rr}	at I _F =10mA to I _R = 10mA, I _R =1mA, R _L =100Ω			4.0	ns

BAS516 Rev300710E

SOD-523
SMD Plastic Package



DIM	Min	Max
A	0.75	0.85
B	0.30	0.40
C	1.55	1.65
D	1.15	1.25

DIM	Min	Max
E	0.60	0.70
F	0.127	0.135
G	5°	

Cathode is marked by a Band

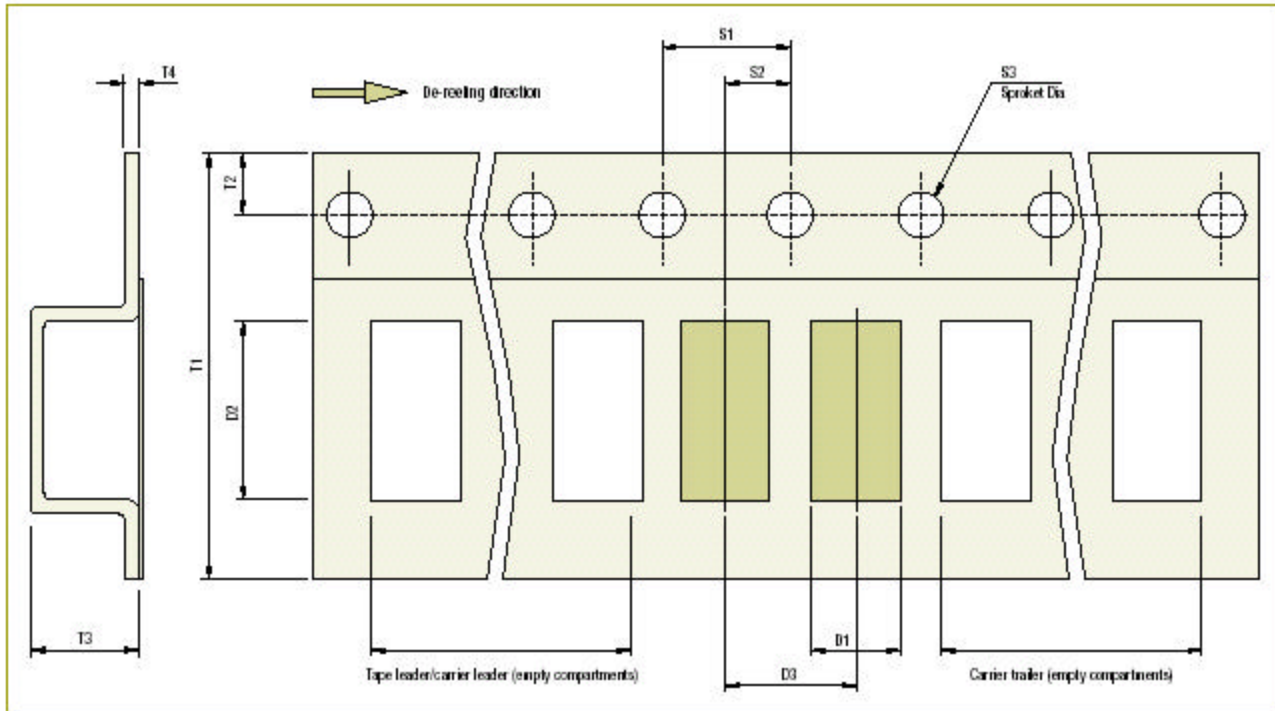
Packaging Specifications ...

Package / Case Type	Packaging Type	Std. Packing Qty	Inner Carton			Outer Carton		
			Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)

SMD Glass/Plastic Packages

SOD-523	T & R	4,000	32K	18.5 x 18.5 x 10.5	0.9	160K	54.5 x 20.2 x 20.2	4.4
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Packaging Tape Specifications for SMD Packages



SMD Tape Specifications (8-12 mm)

Device	D1	D2	D3	T1	T2	T3	T4	S1	S2	S3
						Max	Max			Dia
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
SOD-523	1.3±0.1	2.5±0.1	4.0±0.1	8.3±0.1	1.75±0.1	1.46	0.26	4.0±0.1	2.0±0.1	1.5±0.1

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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