

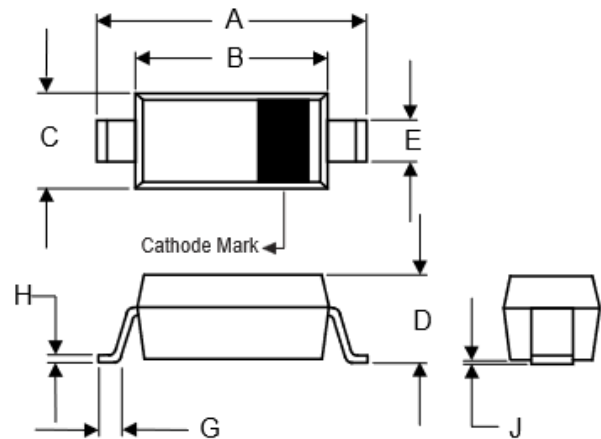
## SMD General Purpose Diode

Primary characteristics		
Parameter	Value	Unit
Repetitive reverse voltage	85	V
Average rectified forward current	200	mA
Power dissipation	250	mW

### Features

- **SOD-323** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- General purpose
- Fast switching speed

### Case dimensions



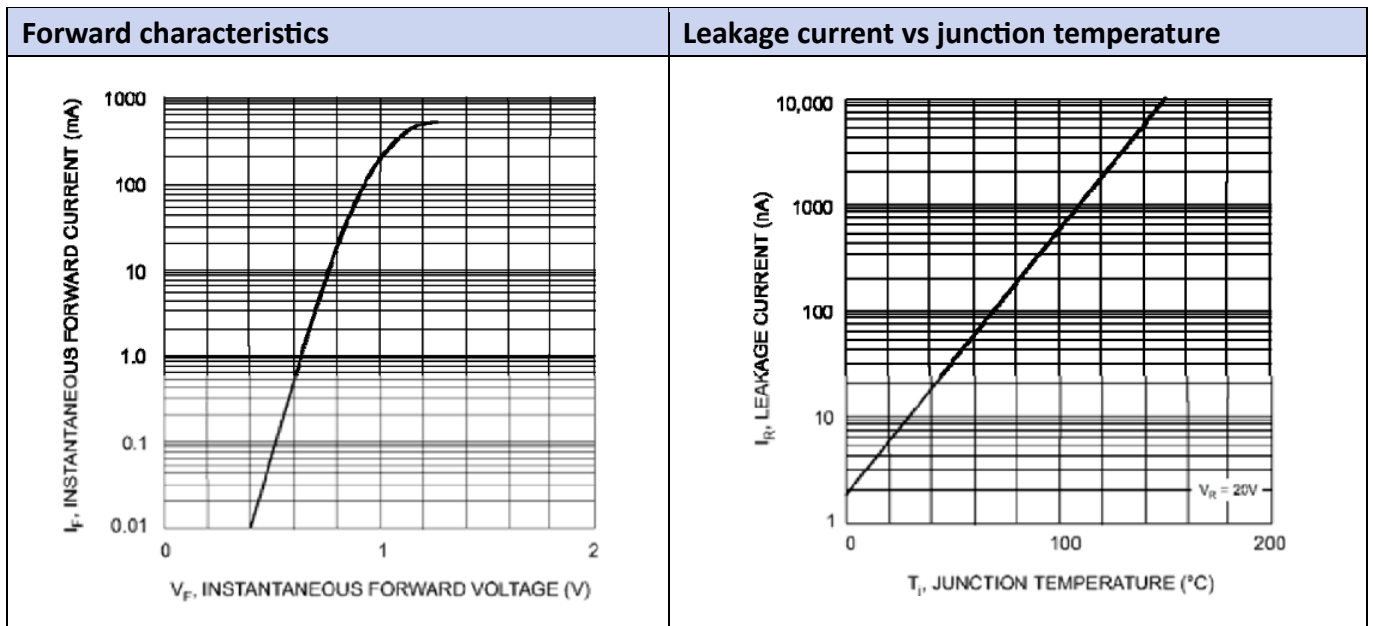
#### SOD-323

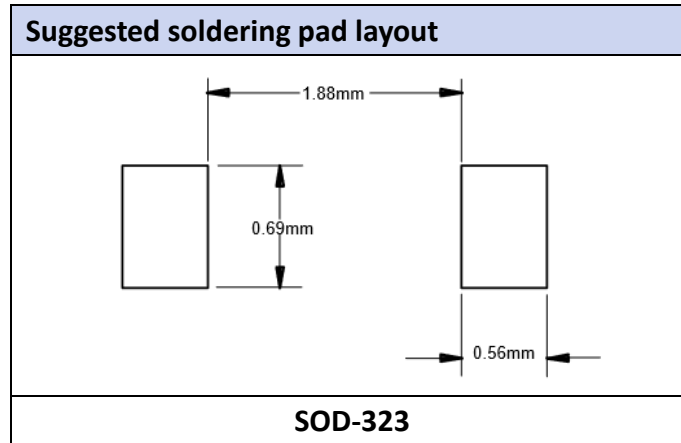
Unit	A	B	C	D	E	G	H	J
mm	2.5 ±0.2	1.7 ±0.1	1.25 ±0.10	1.00 -0.2 +0.15	0.3 -0.05 +0.1	0.25 -0.15 +0.2	0.2 -0.1 +0.05	<0.15

### Absolute maximum ratings (T<sub>a</sub>=25°C)

Parameter	Symbol	Value	Unit
Repetitive reverse voltage	V <sub>RRM</sub>	85	V
Average rectified forward current	I <sub>F(AV)</sub>	200	mA
Non-repetitive peak forward surge current	I <sub>FSM</sub>	Pulse width = 1.0s	0.5
		Pulse width = 1.0μs	4.0
Total power dissipation (T <sub>s</sub> =90°C)	P <sub>tot</sub>	250	mW
Thermal resistance junction to ambient	R <sub>θJA</sub>	833	°C/W
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C
Junction Temperature Range	T <sub>j</sub>	150	°C

Electrical characteristics (T <sub>a</sub> =25°C)					
Parameter	Symbol	Test conditions	Value		Unit
			Min.	Max.	
Breakdown voltage	V <sub>R</sub>	I <sub>R</sub> =5.0μA	75	-	V
		I <sub>R</sub> =100μA	100	-	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1.0mA	-	0.9	V
		I <sub>F</sub> =10mA	-	1.0	
		I <sub>F</sub> =50mA	-	1.1	
		I <sub>F</sub> =150mA	-	1.25	
Reverse current	I <sub>R</sub>	V <sub>R</sub> =20V	-	25	nA
		V <sub>R</sub> =75V	-	1.0	μA
Diode capacitance	C <sub>d</sub>	V <sub>R</sub> =0V, f=1.0MHz	-	4.0	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>rr</sub> =0.1*I <sub>R</sub> , I <sub>F</sub> =I <sub>R</sub> =10mA, R <sub>L</sub> =100Ω	-	3.0	ns





Ordering information				
Part Number	Marking	Package	Shipping Quantity	Dimensions
BAS416WS	D4	SOD-323	3000 pcs / reel	---

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