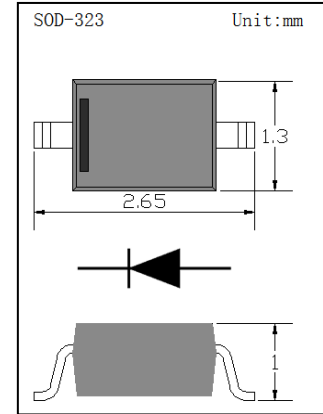


Switching Diode

- ◇ General purpose diodes
- ◇ Fast switching devices
- ◇ **SOD323 Thin SMD package**
- ◇ RoHS compliant / Green EMC
- ◇ Matte Tin (Sn) Lead finish
- ◇ Cathode Band / Device marking
- ◇ Weight: 4.6 mg(approximate)

Device Marking Code	
BAS416	D3



Absolute Maximum Ratings (Ta = 25 °C)

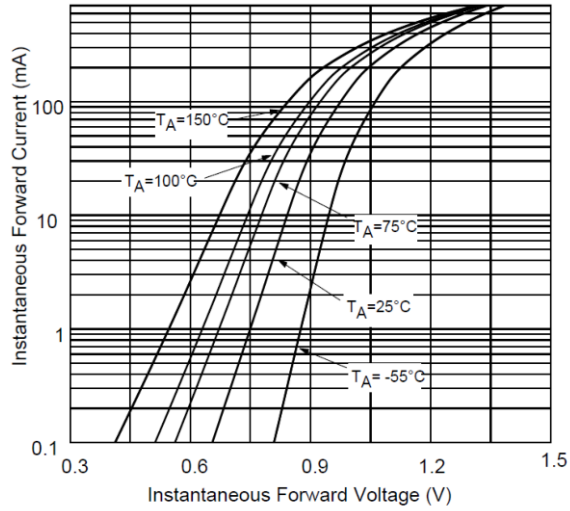
Symbol	Parameter	Value	Units
V_{RMS}	RMS Reverse Voltage $V_{R(RMS)}$	71	V
V_{RRM}	Repetitive Peak Reverse Voltage	100	V
I_{FSM}	Non-Repetitive Peak Forward Current $t=1\mu s$	4	A
I_F	Continuous Forward Current	200	mA
P_D	Power Dissipation	250	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

*1 Pulse width = 1 μs

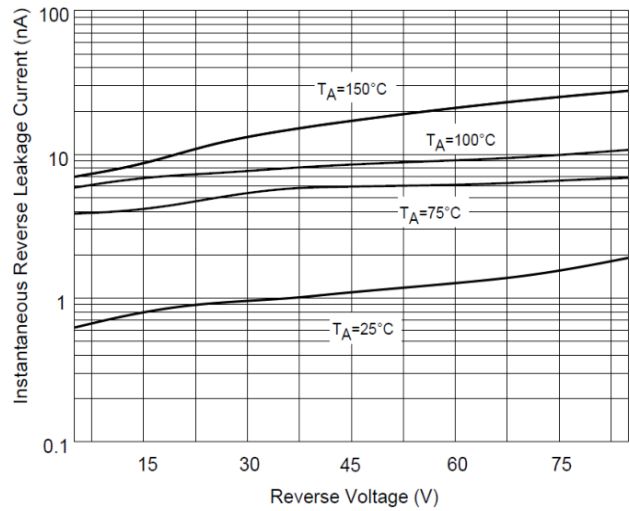
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Max	Units
BV_R	Breakdown Voltage	$I_R = 100\mu A$	100		V
I_R	Reverse Current	$V_R = 75V$ $V_R = 75V, T_J=150^\circ C$		5 80	nA
V_F	Forward Voltage	$I_F = 1mA$		0.9	V
		$I_F = 10mA$		1	V
		$I_F = 50mA$		1.1	V
		$I_F = 150mA$		1.25	V
C	Capacitance	$V_R = 0V, f = 1MHz$		4	pF
t_{rr}	Reverse recovery time	$I_F = I_R = 10mA, I_{tr} = 0.1 \times I_R$		3	us

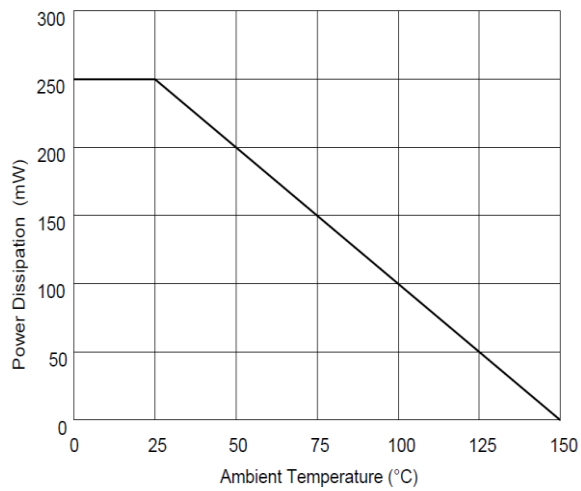
RATING AND CHARACTERISTICS CURVES (BAS416)



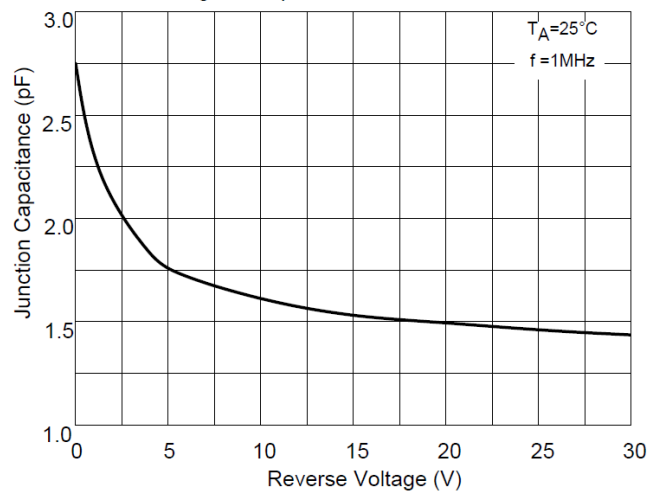
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Power Derating Curve



Capacitance vs Reverse voltage(VR)

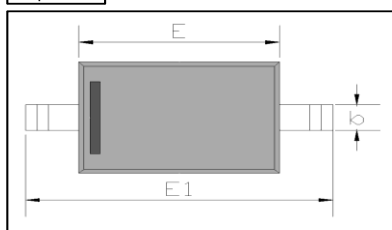
Ordering Information

Package	Package Code	Shipping	Tape wide	Emboss pitch	Tape specification
SOD323	-T	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive

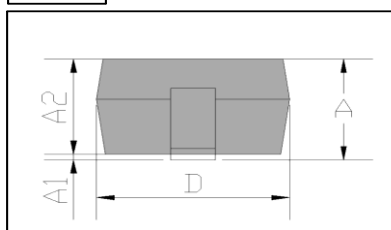
Package Dimensions

Package outline : SOD-323

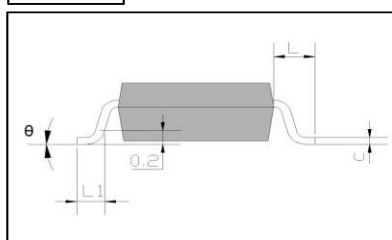
Top View



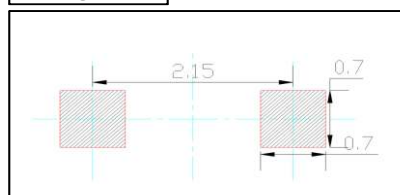
Side View



Front View



Soldering Pattern



Symbol	Dimensions in mm	
	Min.	Max.
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 REF.	
L1	0.250	0.400
θ	0°	8°

Notice:

2. Lead plating: Pb free solder
3. Lead thickness includes solder plating
4. Other Tolerance: ± 0.05
5. Unit: mm

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