

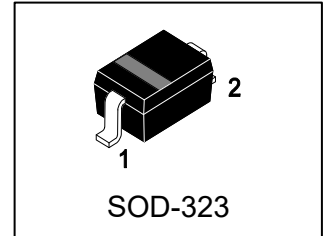
BAS16H

S-BAS16H

Switching Diode

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Small plastic SMD package
- High-speed switching in hybrid thick and thin-film circuits.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAS16H	A6	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
DC Reverse Voltage	VR	75	V
Peak Forward Current	IF	200	mA
Repetitive Peak Forward Surge Current	IFRM	500	mA
Non-Repetitive Peak Forward Surge Current ;Tj=25°C prior to surge	IFSM		
t=1μs		5	A
t=1ms		1	A

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.57	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	RθJA	635	°C/W
Junction and Storage temperature	TJ,Tstg	-55~+150	°C

1. FR-5 = 1.0×0.75×0.062 in.

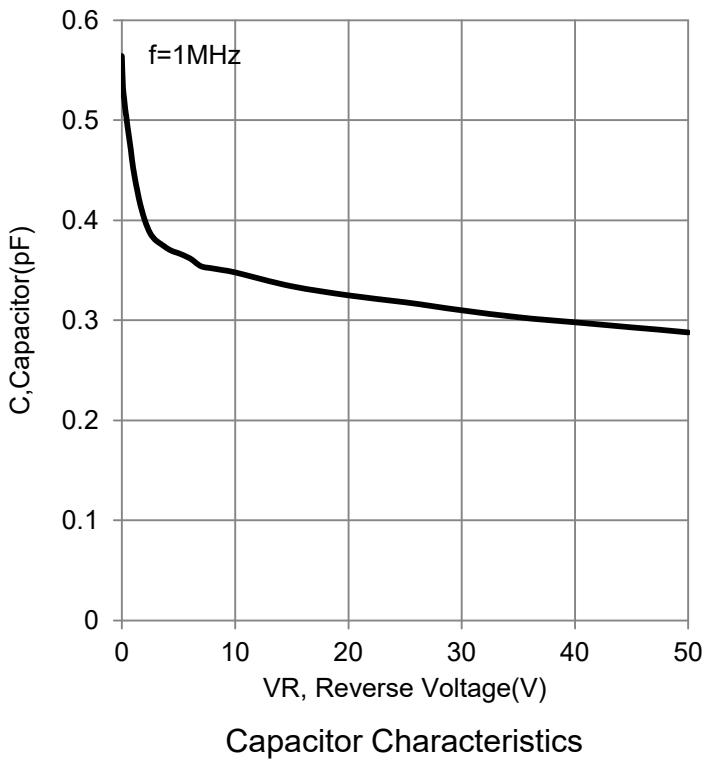
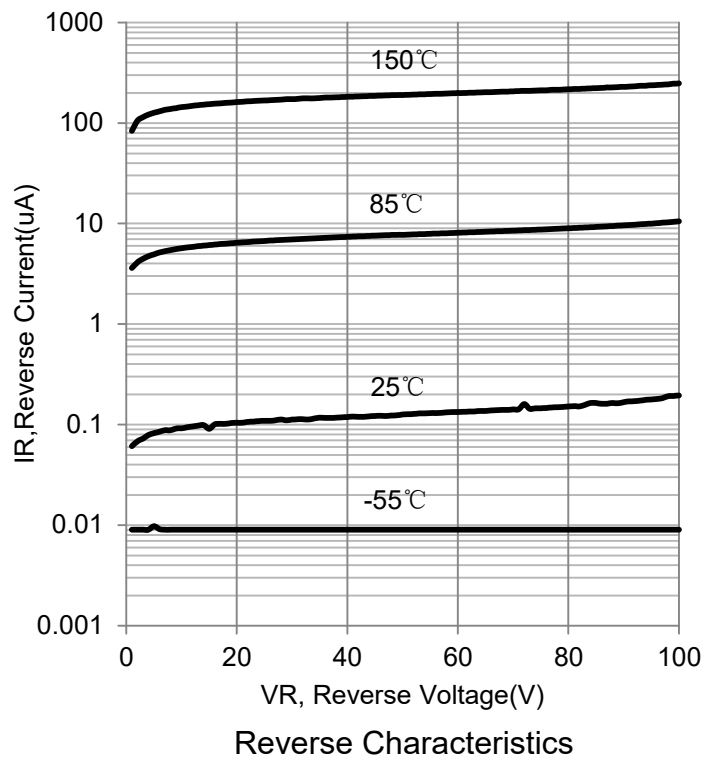
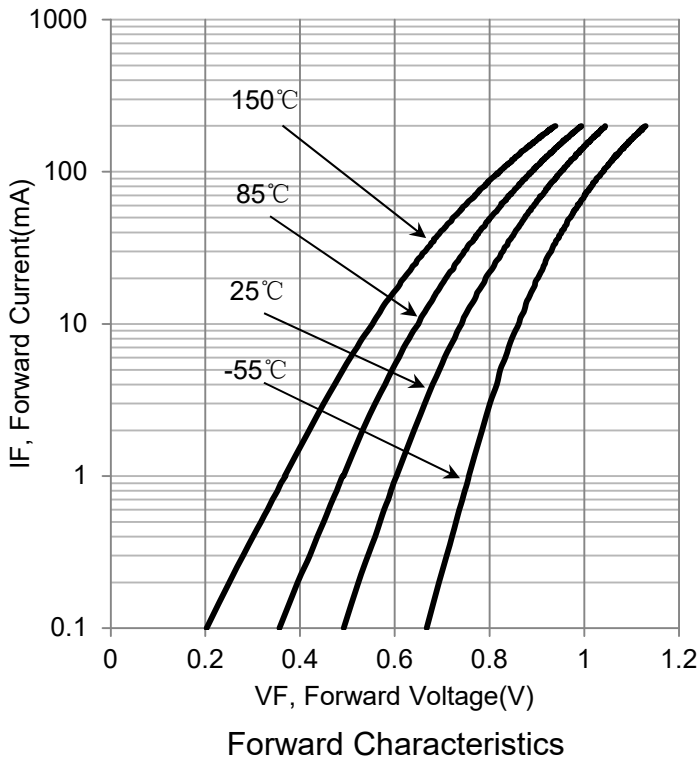


5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (I(BR)=100μA)	VBR	75	-	-	V
Forward Voltage (IF = 1.0 mA _{dc}) (IF = 10 mA _{dc}) (IF = 50 mA _{dc}) (IF = 150 mA _{dc})	VF	- - - -	- - - -	715 855 1000 1250	mV
Reverse Voltage Leakage Current (VR = 75V _{dc}) (VR = 75V _{dc} , TJ = 150°C) (VR = 25V _{dc} , TJ = 150°C)	IR	- - -	- - -	1.0 50 30	μA
Diode Capacitance (VR = 0V, f = 1.0 MHz)	CD	-	-	2.0	pF
Reverse Recovery Time (IF=IR=10mA _d ,RL =50)	trr	-	-	4.0	ns
Forward Recovery Voltage (IF = 10 mA _{dc} , tr = 20 ns)	VFR	-	-	1.75	V



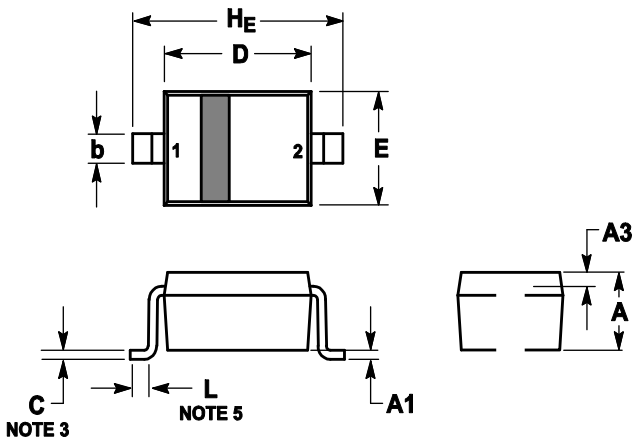
6. ELECTRICAL CHARACTERISTICS CURVES



7.OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.8	0.9	1	0.031	0.035	0.04
A1	0	0.05	0.1	0	0.002	0.004
A3	0.15REF			0.006REF		
b	0.25	0.32	0.4	0.01	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.6	1.7	1.8	0.062	0.066	0.07
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
H _E	2.3	2.5	2.7	0.09	0.098	0.105

8.SOLDERING FOOTPRINT

