



DESCRIPTION

The BAS16BS is available in SOD-882 package.

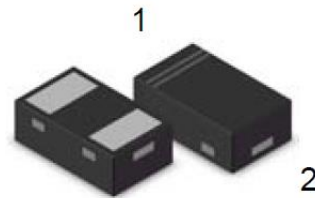
FEATURE

- Small plastic SMD package.
- Continuous reverse voltage: max. 75 V.
- High-speed switching in hybrid thick and thin-film circuits

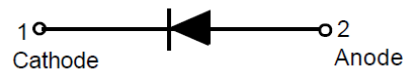
ORDERING INFORMATION

Package Type	Part Number
SOD-882	BAS16BS
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



SOD-882



PIN#	DESCRIPTION
1	Cathode
2	Anode



ABSOLUTE MAXIMUM RATINGS

T_A = 25°C

V _R , Continuous Reverse Voltage		+75V
I _F , Peak Forward Current		200mA
I _{FSM} , Peak Forward Surge Current		500mA
P _D , Total Device Dissipation FR-5 Board (1)	T _A = 25°C	200mW
	Derate Above 25°C	1.57mW/°C
R _{θJA} , Thermal Resistance from Junction to Ambient		635°C/W
T _J , Junction and Storage Temperature		-55°C~+150°C
T _{STG} , Junction and Storage Temperature		-55°C~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

(1) FR-4 Minimum Pad

ELECTRICAL CHARACTERISTICS

T_A = 25°C, unless otherwise specified.

Parameter	Symbol	Conditions	Min	Typ.	Max	Unit
Reverse Voltage Leakage Current	I _R	V _R =75V	-	-	1	uA
		V _R =75V, T _J = 150°C	-	-	50	
		V _R =25V, T _J = 150°C	-	-	30	
Reverse Breakdown Voltage	V _{BR}	I _{BR} = 100 μA	75	-	-	V
Forward Voltage	V _F	I _F = 1mA	-	-	715	mV
		I _F = 10mA	-	-	855	
		I _F = 50mA	-	-	1000	
		I _F = 150mA	-	-	1250	
Diode Capacitance	C _d	f=1MHz, V _R = 0	-	-	2	pF
Reverse Recovery Time	T _{rr}	I _F = I _R = 10mA, R _L = 50Ω	-	-	4	nS
Forward Recovery Voltage	V _{FR}	I _F = 10mA, t _r = 20ns	-	-	1.75	V
Stored Charge	Q _S	I _F = 10mA, V _R = 5.0 V, R _L = 500Ω	-	-	45	pC



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. I_F vs. V_F

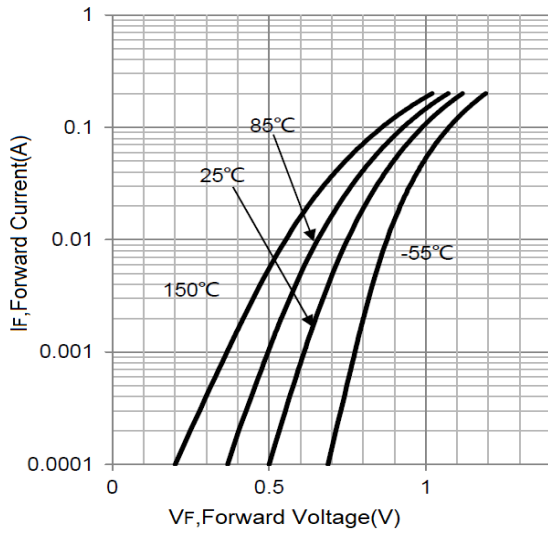


Fig 2. I_R vs. V_R

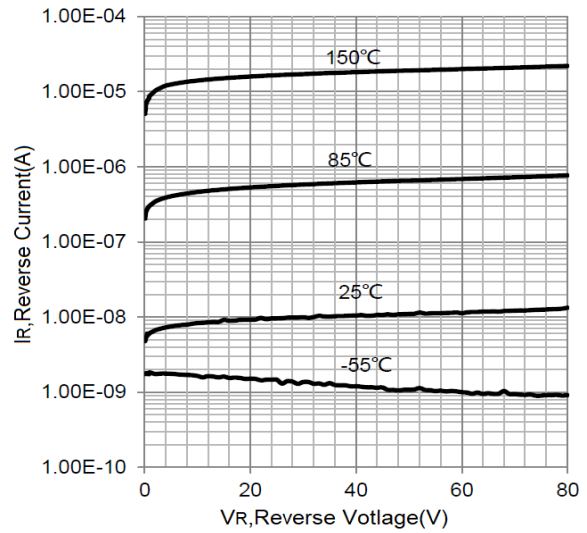
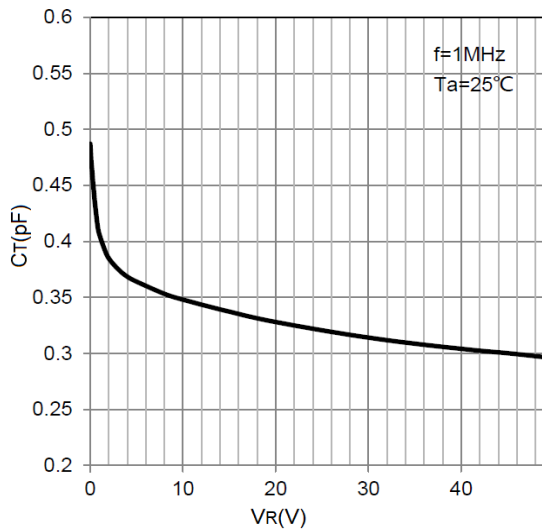


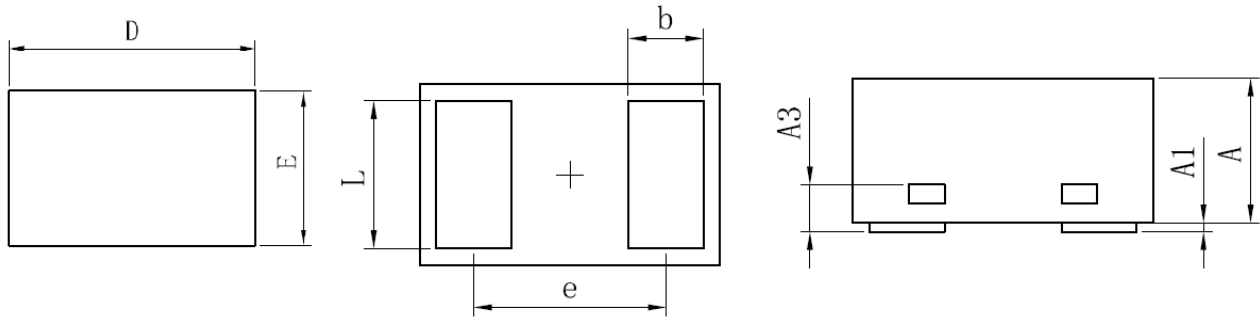
Fig 3. C_T vs. V_R





PACKAGE INFORMATION

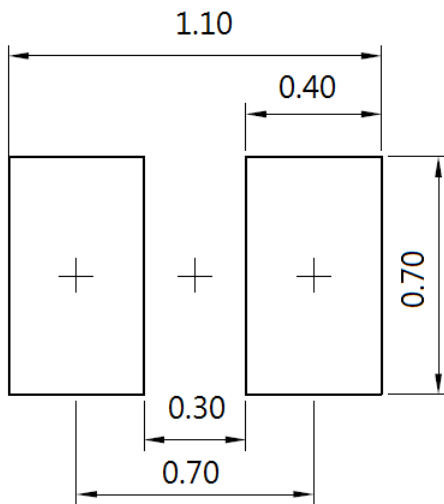
Dimension in SOD-882 Package (Unit: mm)



TOP VIEW

BOTTOM VIEW

SIDE VIEW



SOLDERING FOOTPRINT

SYMBOL	MIN	MAX
A	0.430	0.530
A1	0.000	0.050
A3	0.127 REF	
b	0.200	0.300
D	0.950	1.050
E	0.550	0.650
e	-	-
L	0.440	0.540



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