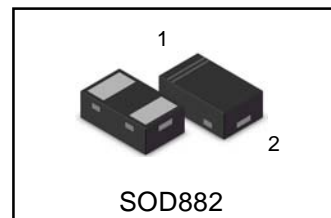


Switching Diode

FEATURE

- Small plastic SMD package.
- Continuous reverse voltage: max. 75 V.
- High-speed switching in hybrid thick and thin-film circuits.
- We declare that the material of product compliance with RoHS requirements.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

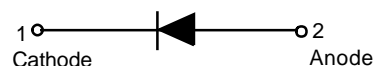
LBAS16BST5G
S-LBAS16BST5G



DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAS16BST1G	3*	5000/Tape&Reel
LBAS16BST3G	3*	8000/Tape&Reel
LBAS16BST5G	3*	10000/Tape&Reel

*Rotated 90°



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	75	Vdc
Peak Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$	P_D	200	mW
Derate above 25°C		1.57	mW/°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C/W
Junction and Storage Temperature	T_J, T_{stg}	-55to+150	°C

**FR-4 Minimum Pad

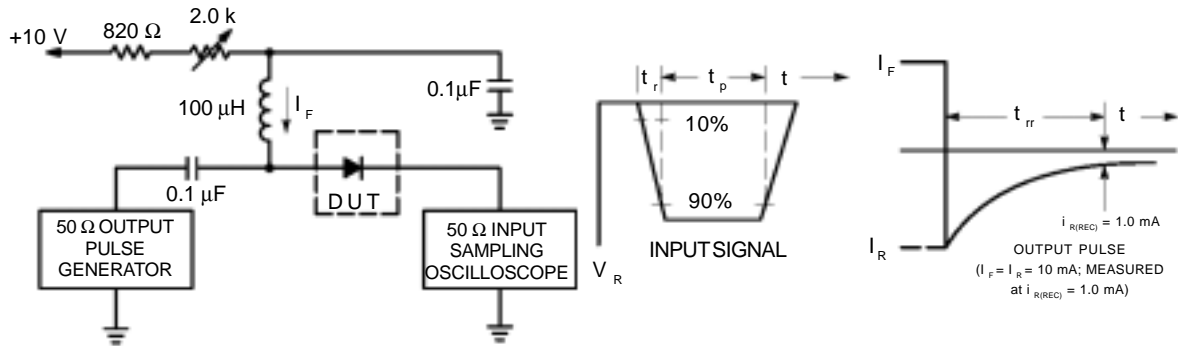
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Reverse Voltage Leakage Current ($V_R = 75\text{ Vdc}$) ($V_R = 75\text{ Vdc}, T_J = 150^\circ\text{C}$) ($V_R = 25\text{ Vdc}, T_J = 150^\circ\text{C}$)	I_R	—	1.0 50 30	μAdc
Reverse Breakdown Voltage ($I_{BR} = 100\ \mu\text{Adc}$)	$V_{(BR)}$	75	—	Vdc
Forward Voltage ($I_F = 1.0\ \text{mAdc}$) ($I_F = 10\ \text{mAdc}$) ($I_F = 50\ \text{mAdc}$) ($I_F = 150\ \text{mAdc}$)	V_F	—	715 855 1000 1250	mV
Diode Capacitance ($V_R = 0, f = 1.0\ \text{MHz}$)	C_D	—	2.0	pF
Forward Recovery Voltage ($I_F = 10\ \text{mAdc}, t_r = 20\ \text{ns}$)	V_{FR}	—	1.75	Vdc
Reverse Recovery Time ($I_F = I_R = 10\ \text{mAdc}, R_L = 50\ \Omega$)	t_{rr}	—	4.0	ns
Stored Charge ($I_F = 10\ \text{mAdc}$ to $V_R = 5.0\ \text{Vdc}, R_L = 500\ \Omega$)	Q_s	—	45	pC

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- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10mA.
 2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

TYPICAL CHARACTERISTICS

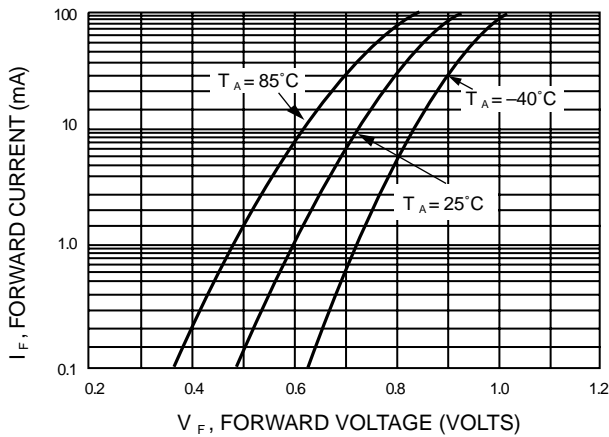


Figure 2. Forward Voltage

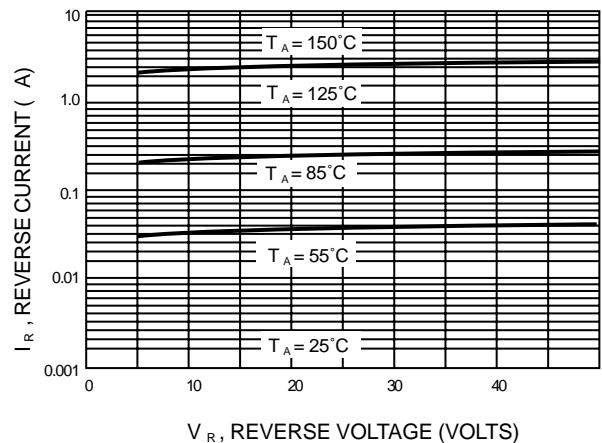


Figure 3. Leakage Current

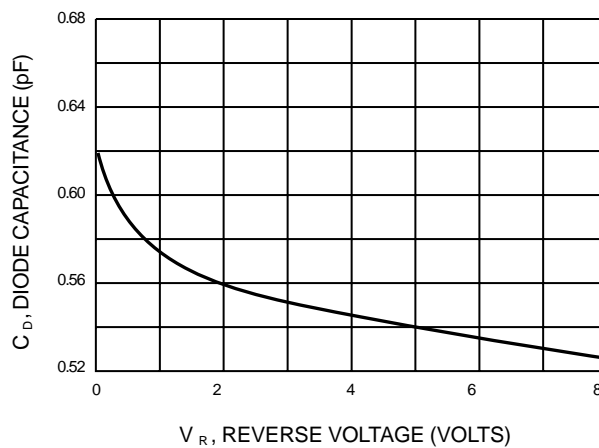


Figure 4. Capacitance

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DIMENSION OUTLINE:

Unit:mm

