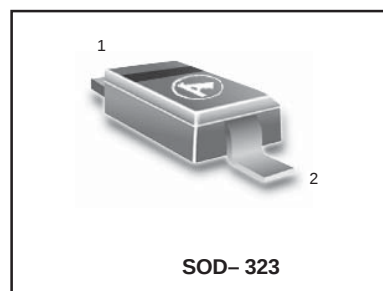


High Voltage Switching Diode

- 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.

LBAS20HT1G
S-LBAS20HT1G



ORDERING INFORMATION

Device	Marking	Shipping
LBAS20HT1G S-LBAS20HT1G	JR	3000/Tape&Reel
LBAS20HT3G S-LBAS20HT3G	JR	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	200	Vdc
Peak Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	625	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/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

*FR-5 Minimum Pad

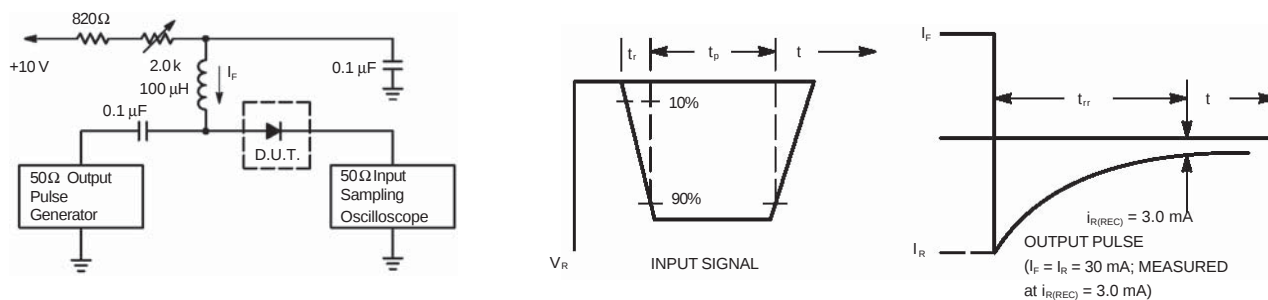
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Reverse Voltage Leakage Current ($V_R = 200\text{ Vdc}$) ($V_R = 200\text{ Vdc}, T_J = 150^\circ\text{C}$)	I_R	—	1.0 100	μAdc
Reverse Breakdown Voltage ($I_{BR} = 100\text{ }\mu\text{Adc}$)	$V_{(BR)}$	200	—	Vdc
Forward Voltage ($I_F = 100\text{ mAdc}$) ($I_F = 200\text{ mAdc}$)	V_F	—	1000 1250	mV
Diode Capacitance ($V_R = 0, f = 1.0\text{ MHz}$)	C_D	—	5.0	pF
Reverse Recovery Time ($I_F = I_R = 30\text{ mAdc}, R_L = 100\text{ }\Omega$)	t_{rr}	—	50	ns

LBAS20HT1G,S-LBAS20HT1G



- Notes:**
1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 30 mA.
 2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 30 mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

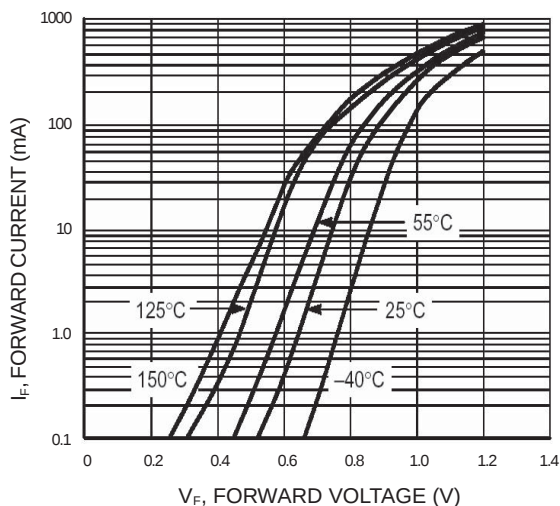


Figure 2. Forward Current

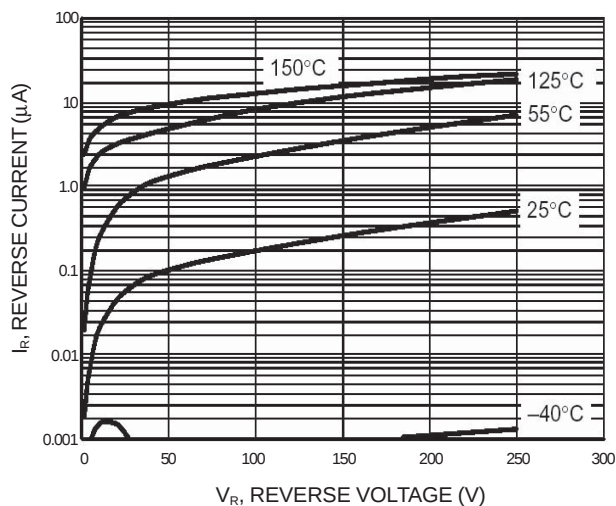


Figure 3. Leakage Current

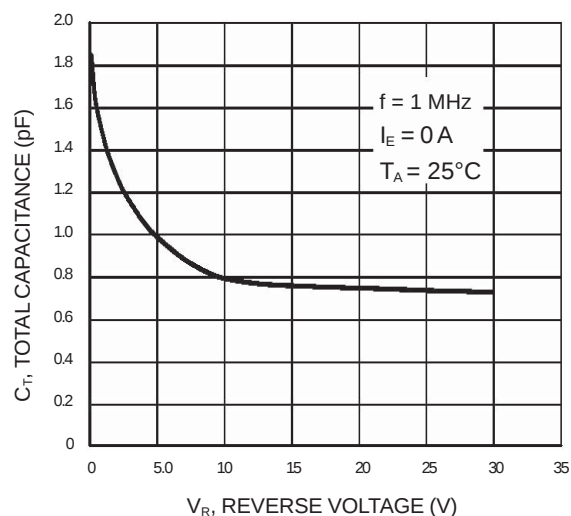


Figure 4. Total Capacitance

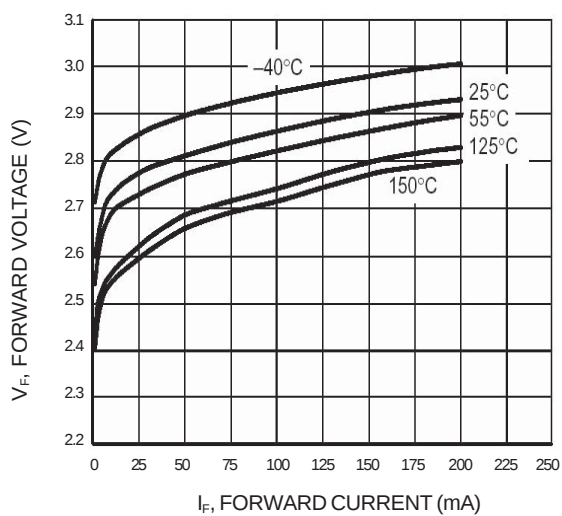
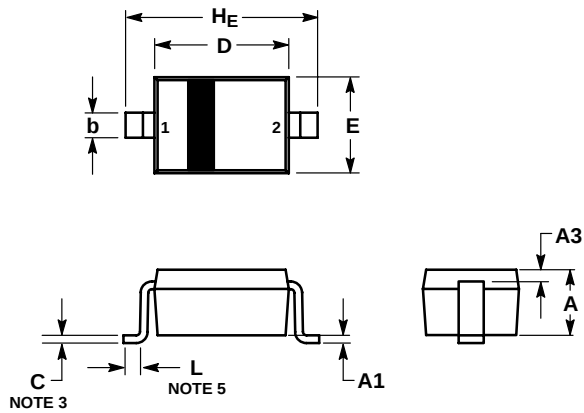


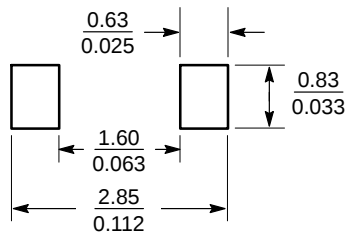
Figure 5. Forward Voltage

LBAS20HT1G,S-LBAS20HT1G

SOD-323



SOLDERING FOOTPRINT*



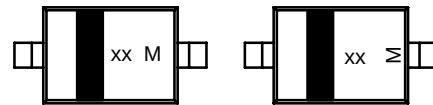
NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. LEAD THICKNESS SPECIFIED PER L/F DRAWING WITH SOLDER PLATING.
4. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
5. DIMENSION L IS MEASURED FROM END OF RADIUS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A3	0.15 REF			0.006 REF		
b	0.25	0.32	0.4	0.010	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.60	1.70	1.80	0.062	0.066	0.070
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.30	2.50	2.70	0.090	0.098	0.105

STYLE 1:
PIN 1. CATHODE
2. ANODE

GENERIC MARKING DIAGRAM*



xx = Specific Device Code
M = Date Code