

Silicon Switching Diode

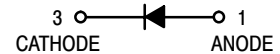
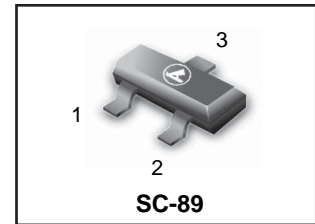
FEATURE

We declare that the material of product compliance with RoHS requirements.

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

Rating	Symbol	Max	Unit
Continuous Reverse Voltage	V_R	75	V
Recurrent Peak Forward Current	I_R	200	mA
Peak Forward Surge Current Pulse Width = 10 μs	$I_{FM(\text{surge})}$	500	mA
Total Power Dissipation, One Diode Loaded $T_A = 25^\circ\text{C}$ Derate above 25°C Mounted on a Ceramic Substrate (10 x 8 x 0.6 mm)	P_D	150 1.6	mW mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

LBAS16TT1G



THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient One Diode Loaded Mounted on a Ceramic Substrate (10 x 8 x 0.6 mm)	$R_{\theta JA}$	0.625	$^\circ\text{C}/\text{mW}$

DEVICE MARKING

LBAS16TT1G= A6

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

Characteristic	Symbol	Min	Max	Unit
Forward Voltage ($I_F = 1.0 \text{ mA}$) ($I_F = 10 \text{ mA}$) ($I_F = 50 \text{ mA}$) ($I_F = 150 \text{ mA}$)	V_F	— — — —	715 866 1000 1250	mV
Reverse Current ($V_R = 75 \text{ V}$) ($V_R = 75 \text{ V}, T_J = 150^\circ\text{C}$) ($V_R = 25 \text{ V}, T_J = 150^\circ\text{C}$)	I_R	— — —	1.0 50 30	μA
Capacitance ($V_R = 0, f = 1.0 \text{ MHz}$)	C_D	—	2.0	pF
Reverse Recovery Time ($I_F = I_R = 10 \text{ mA}, R_L = 50 \Omega$) (Figure 1)	t_{rr}	—	6.0	ns
Stored Charge ($I_F = 10 \text{ mA}$ to $V_R = 6.0 \text{ V}, R_L = 500 \Omega$) (Figure 2)	QS	—	45	PC
Forward Recovery Voltage ($I_F = 10 \text{ mA}, t_r = 20 \text{ ns}$) (Figure 3)	V_{FR}	—	1.75	V

Ordering Information

Device	Marking	Shipping
LBAS16TT1G	A6	3000/Tape&Reel
LBAS16TT3G	A6	10000/Tape&Reel

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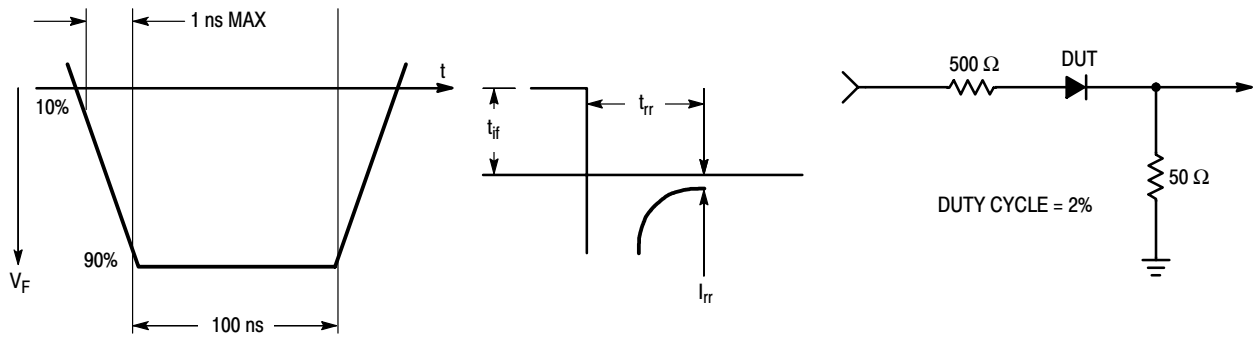


Figure 1. Reverse Recovery Time Equivalent Test Circuit

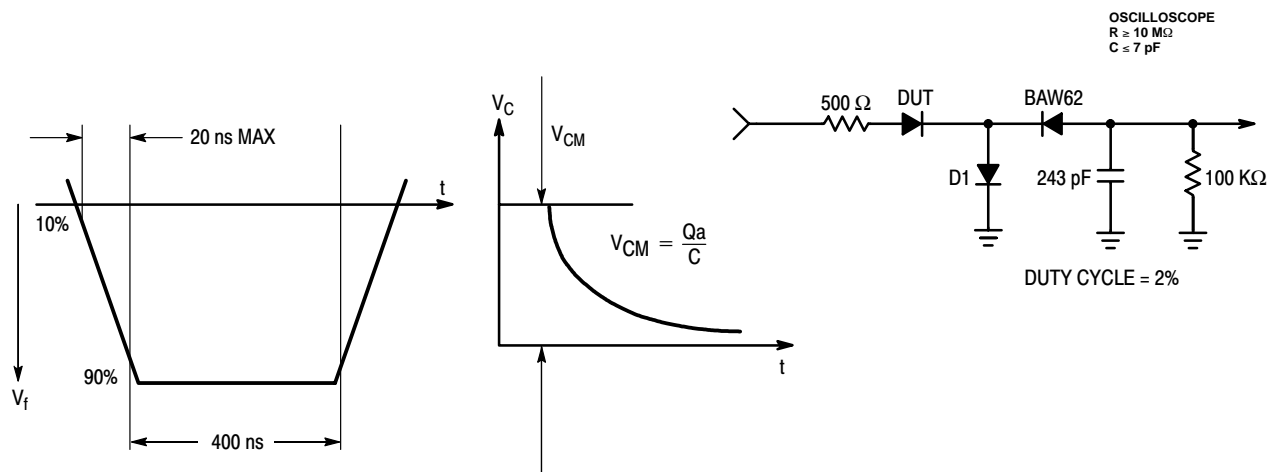


Figure 2. Recovery Charge Equivalent Test Circuit

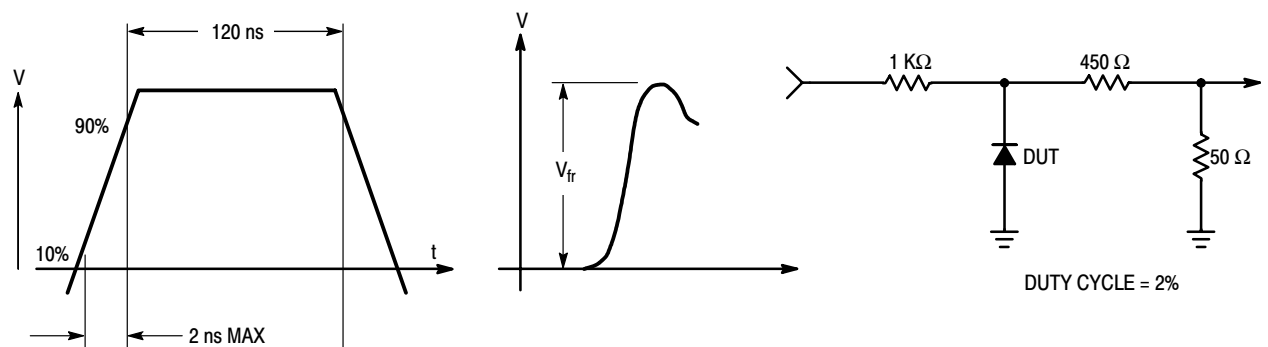
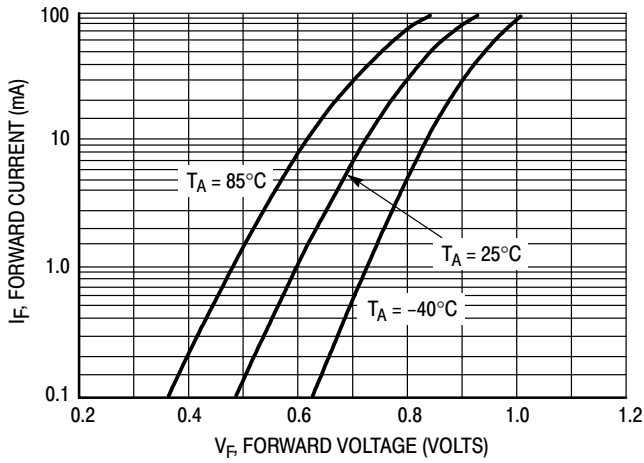
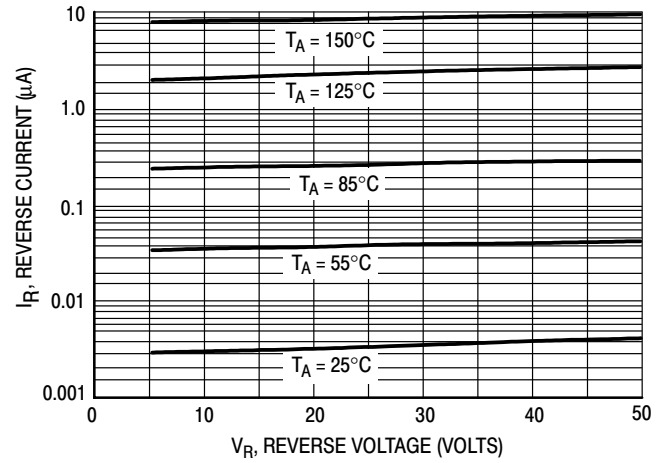
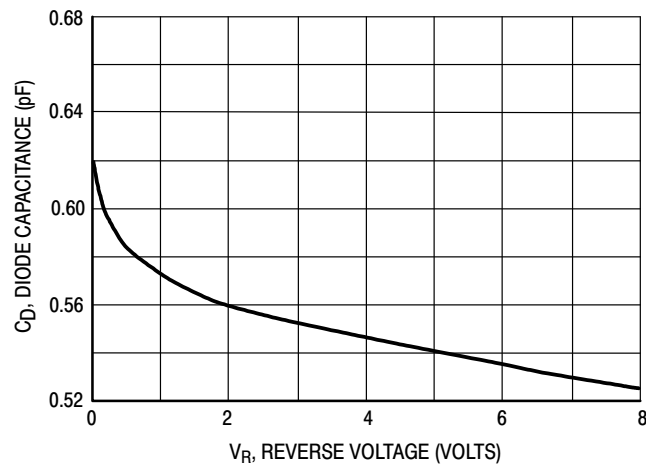
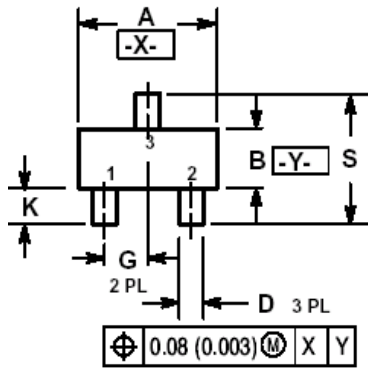


Figure 3. Forward Recovery Voltage Equivalent Test Circuit

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Figure 4. Forward Voltage

Figure 5. Leakage Current

Figure 6. Capacitance

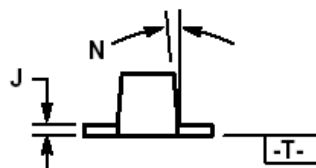
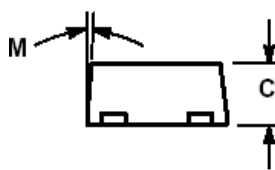
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NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. 463C-01 OBSOLETE, NEW STANDARD 463C-02.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.50	1.60	1.70	0.059	0.063	0.067
B	0.75	0.85	0.95	0.030	0.034	0.040
C	0.60	0.70	0.80	0.024	0.028	0.031
D	0.23	0.28	0.33	0.009	0.011	0.013
G	0.50 BSC			0.020 BSC		
H	0.53 REF			0.021 REF		
J	0.10	0.15	0.20	0.004	0.006	0.008
K	0.30	0.40	0.50	0.012	0.016	0.020
L	1.10 REF			0.043 REF		
M	---	---	10 °	---	---	10 °
N	---	---	10 °	---	---	10 °
S	1.50	1.60	1.70	0.059	0.063	0.067

