

Silicon Switching Diode

FEATURE

- 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.

MAXIMUM RATINGS (T_A = 25°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(surge)}	500	mA
Total Power Dissipation, One Diode Loaded T _A = 25°C Derate above 25°C Mounted on a Ceramic Substrate (10 x 8 x 0.6 mm)	P _D	200 1.6	mW mW/°C
Operating and Storage Junction Temperature Range	T _J , T _{stg}	-55 to +150	°C

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 _{θJA}	0.625	°C/mW

DEVICE MARKING

LBAS16WT1G= A6

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Forward Voltage (I _F = 1.0 mA) (I _F = 10 mA) (I _F = 50 mA) (I _F = 150 mA)	V _F	— — — —	715 855 1000 1250	mV
Reverse Current (V _R = 75 V) (V _R = 75 V, T _J = 150°C) (V _R = 25 V, T _J = 150°C)	I _R	— — —	1.0 50 30	μA
Capacitance (V _R = 0, f = 1.0 MHz)	C _D	—	2.0	pF
Reverse Recovery Time (I _F = I _R = 10 mA, R _L = 50 Ω) (Figure 1)	t _{rr}	—	6.0	ns
Stored Charge (I _F = 10 mA to V _R = 6.0 V, R _L = 500 Ω) (Figure 2)	Q _S	—	45	PC
Forward Recovery Voltage (I _F = 10 mA, t _r = 20 ns) (Figure 3)	V _{FR}	—	1.75	V

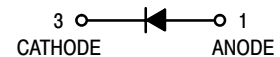
ORDERING INFORMATION

Device	Marking	Shipping
LBAS16WT1G S-LBAS16WT1G	A6	3000/Tape&Reel
LBAS16WT3G S-LBAS16WT3G	A6	10000/Tape&Reel

LBAS16WT1G
S-LBAS16WT1G



SC-70



LBAS16WT1G, S-LBAS16WT1G

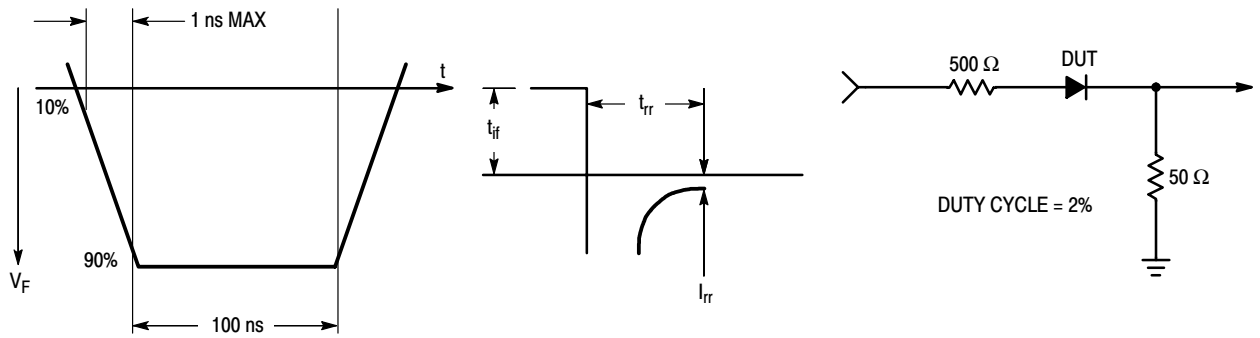


Figure 1. Reverse Recovery Time Equivalent Test Circuit

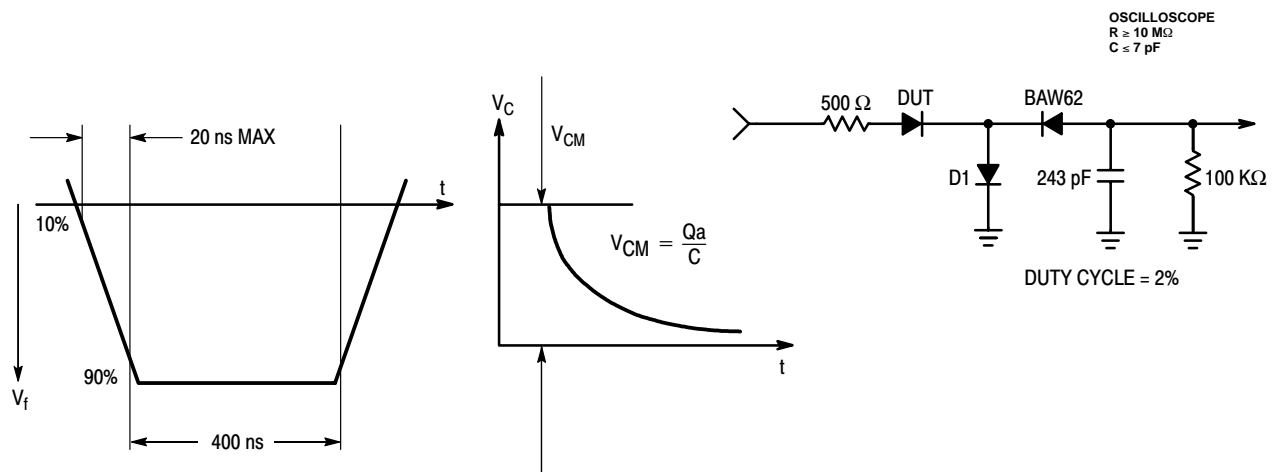


Figure 2. Recovery Charge Equivalent Test Circuit

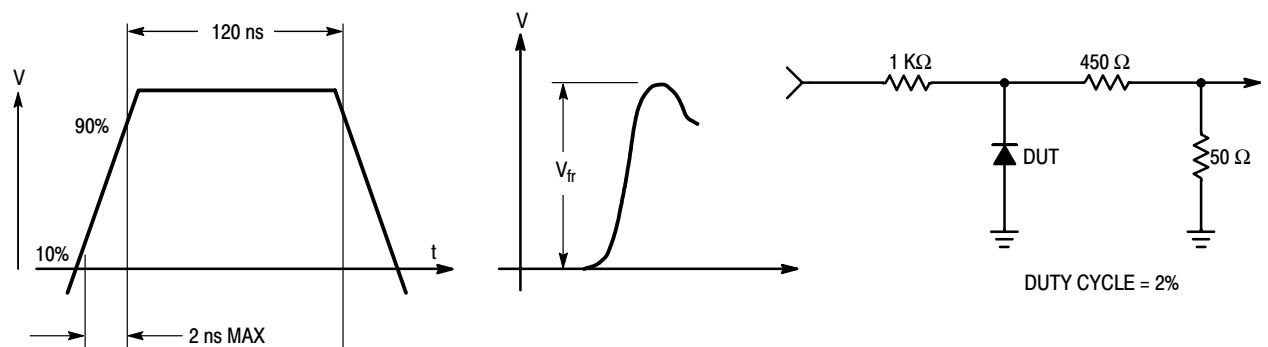


Figure 3. Forward Recovery Voltage Equivalent Test Circuit

LBAS16WT1G, S-LBAS16WT1G

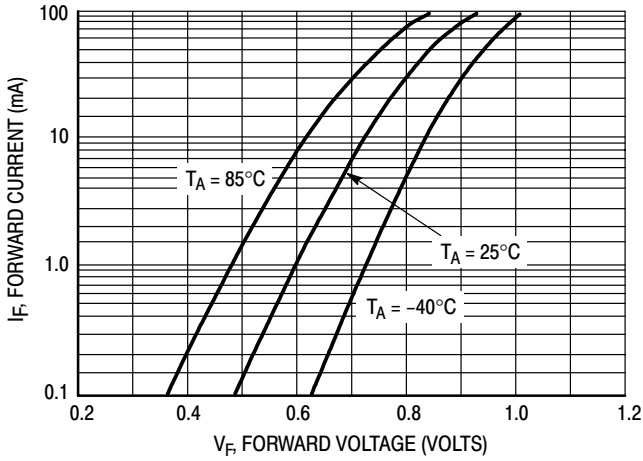


Figure 4. Forward Voltage

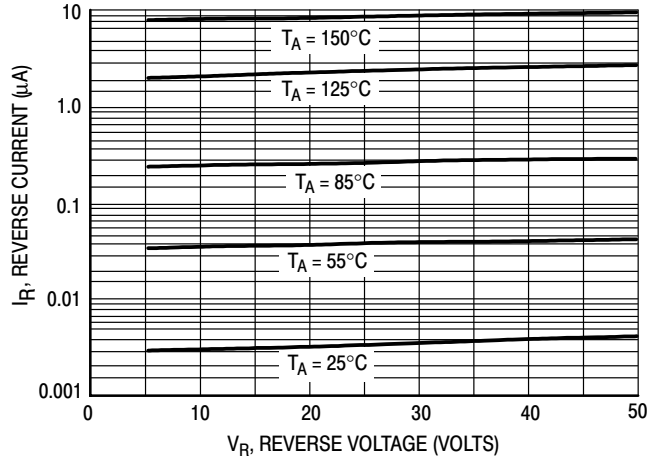


Figure 5. Leakage Current

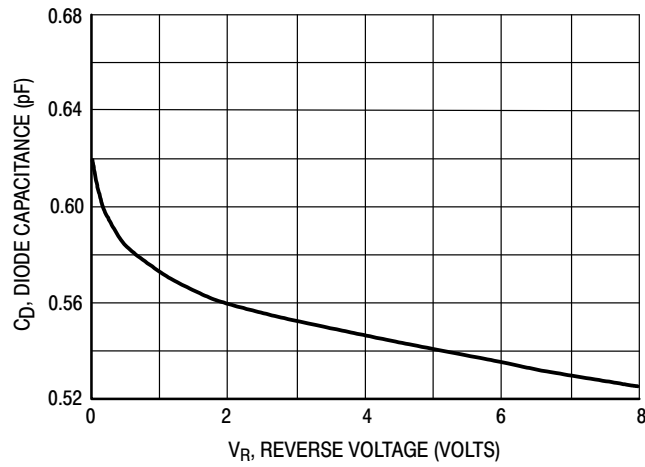


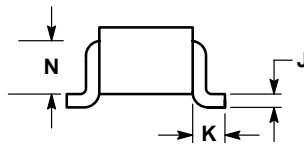
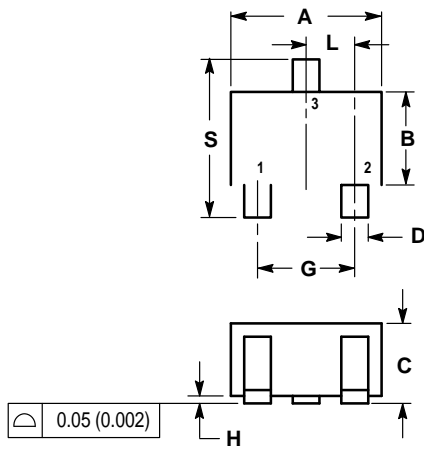
Figure 6. Capacitance

LBAS16WT1G, S-LBAS16WT1G

SC-70

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.032	0.040	0.80	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017 REF		0.425 REF	
L	0.026 BSC		0.650 BSC	
N	0.028 REF		0.700 REF	
S	0.079	0.095	2.00	2.40

- PIN 1. ANODE
 2. NO CONNECTION
 3. CATHODE

