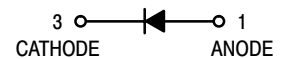
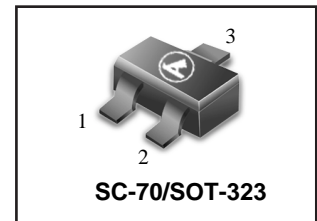


Silicon Switching Diode

LBAS16WT1

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

LBAS16WT1 = 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	—	715 866 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

LBAS16WT1

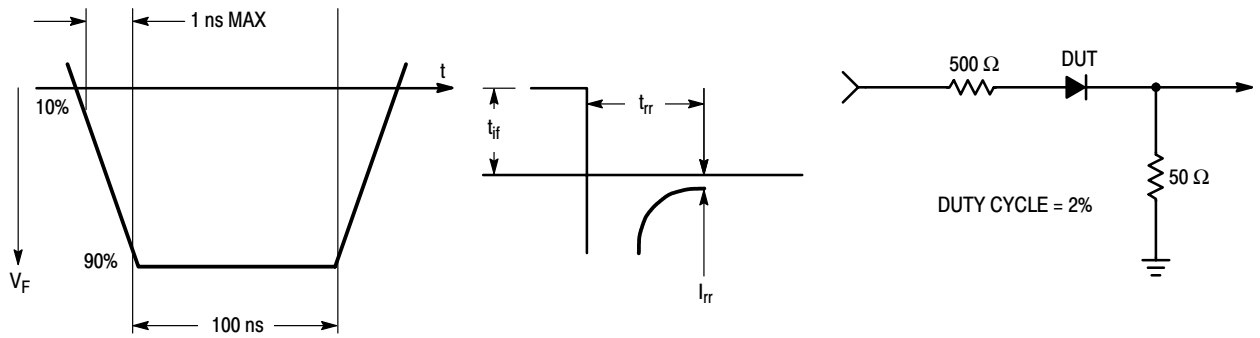


Figure 1. Reverse Recovery Time Equivalent Test Circuit

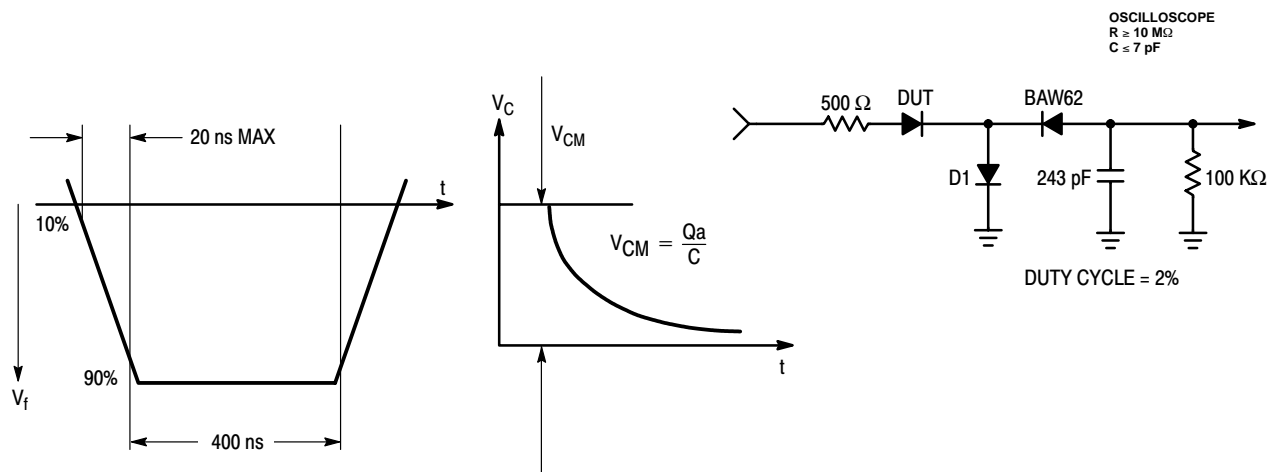


Figure 2. Recovery Charge Equivalent Test Circuit

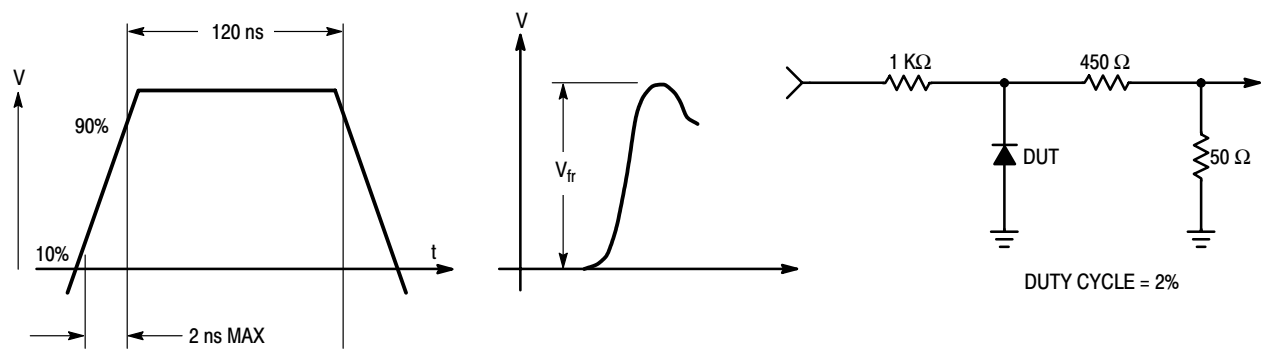
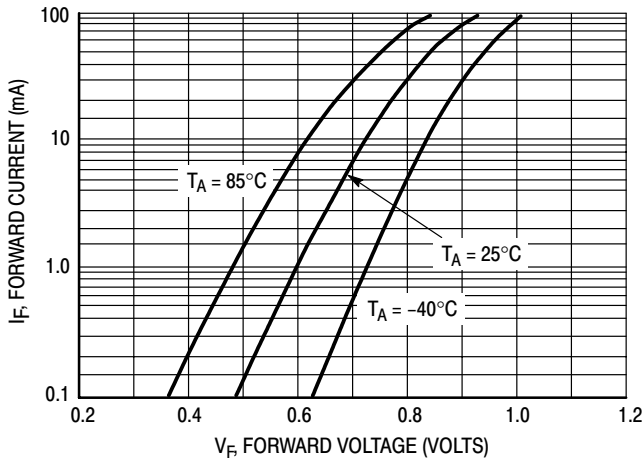
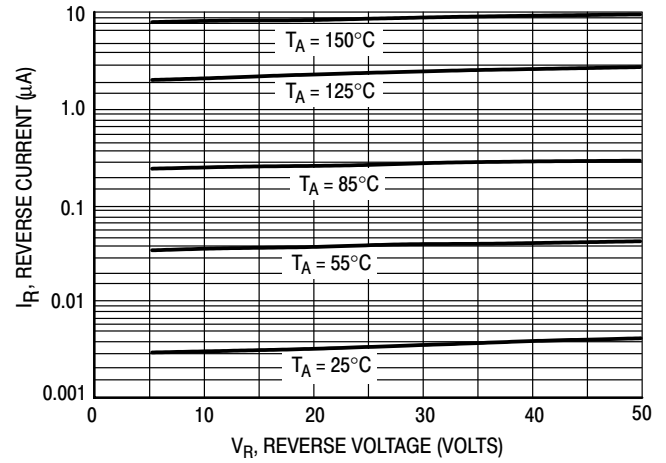
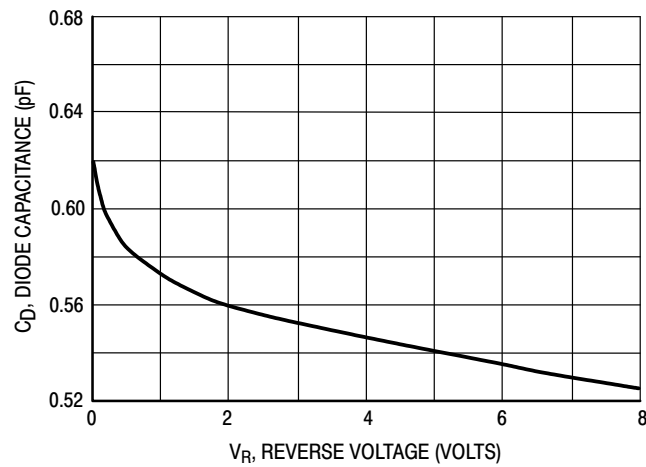


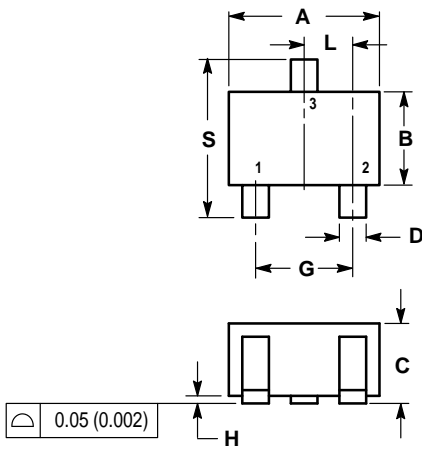
Figure 3. Forward Recovery Voltage Equivalent Test Circuit

LBAS16WT1

Figure 4. Forward Voltage

Figure 5. Leakage Current

Figure 6. Capacitance

SC-70 / SOT-323

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

