

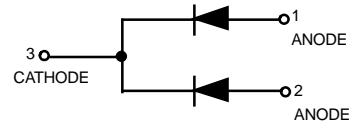
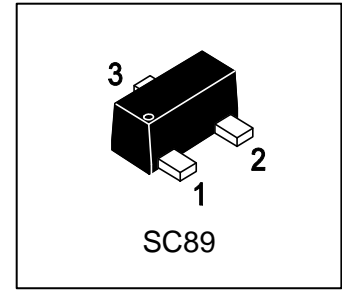
LBAV70TT1G

S-LBAV70TT1G

Monolithic Dual Switching Diode

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
LBAV70TT1G	A4	3000/Tape&Reel
LBAV70TT3G	A4	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	70	V
Forward Current	IF	200	mA
Peak Forward Surge Current	IFM(surge)	500	mA

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	225 1.8	mW mW/°C
Thermal Resistance Junction-to-Ambient	ROJA	555	°C/W
Total Device Dissipation, Alumina Substrate (Note 2) @ TA = 25°C Derate above 25°C	PD	300 2.9	mW mW/°C
Thermal Resistance Junction-to-Ambient	ROJA	345	°C/W
Junction and Storage temperature	TJ,Tstg	-55~+150	°C

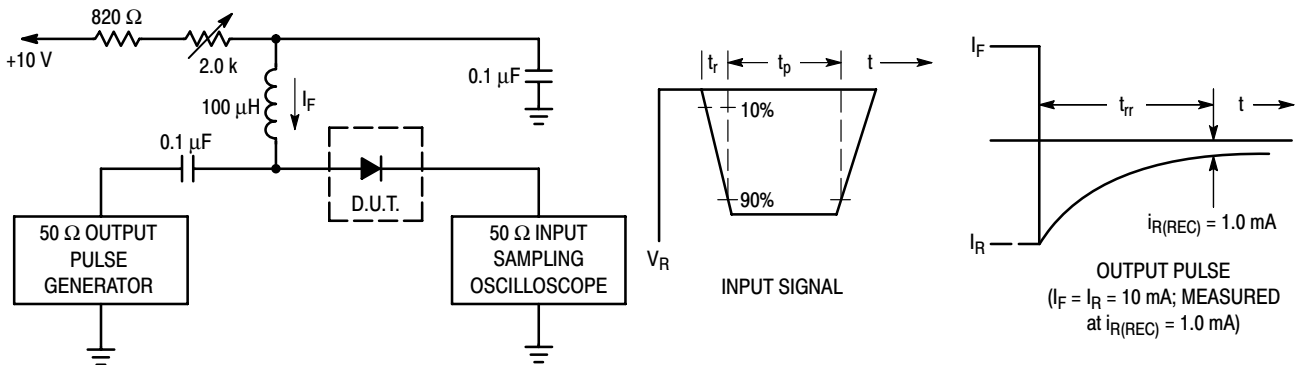
1.FR-5 = 1.0 × 0.75 × 0.062 in.

2.Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (I(BR)=100μA)	VBR	70	-	-	V
Reverse Voltage Leakage Current(Note 3) (VR = 70V)	IR	-	-	5.0	μA
(VR = 50V)		-	-	100	nA
Diode Capacitance (VR = 0V, f = 1.0 MHz)	CD	-	-	1.5	pF
Forward Voltage (IF = 1.0 mA)	VF	-	-	715	mV
(IF = 10 mA)		-	-	855	
(IF = 50 mA)		-	-	1000	
(IF = 150 mA)		-	-	1250	
Reverse Recovery Time (Figure 1) (IF=IR=10mA, RL=100Ohm, IR(REC)=1.0 mA)	trr	-	-	6.0	ns
Forward Recovery Voltage (IF = 10 mA, tr = 20 ns)	VRF	-	-	1.75	V

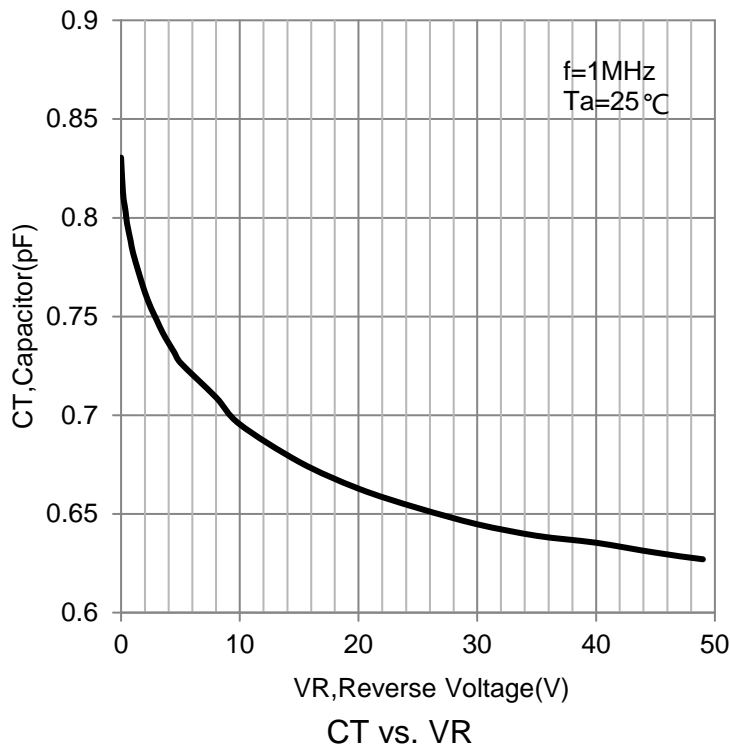
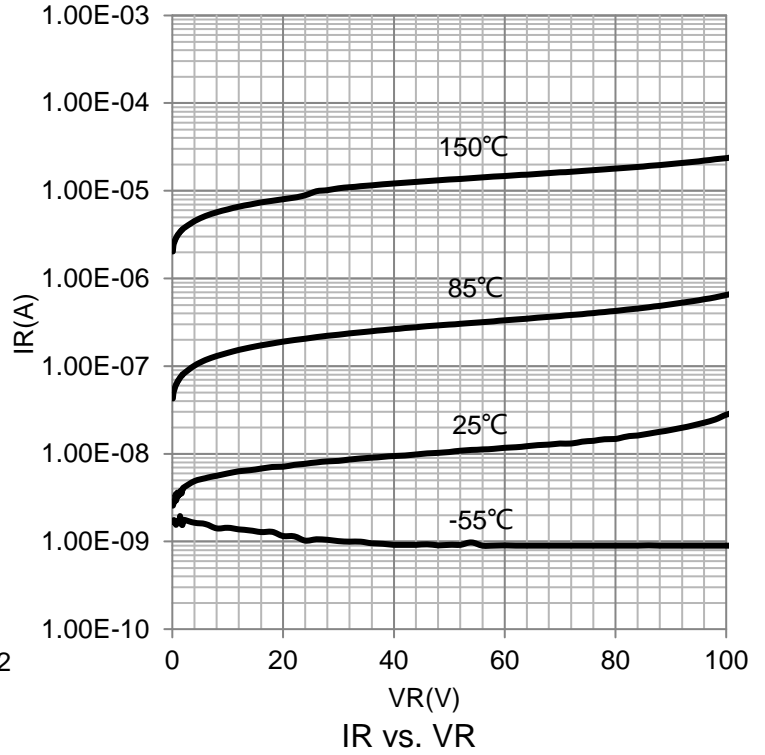
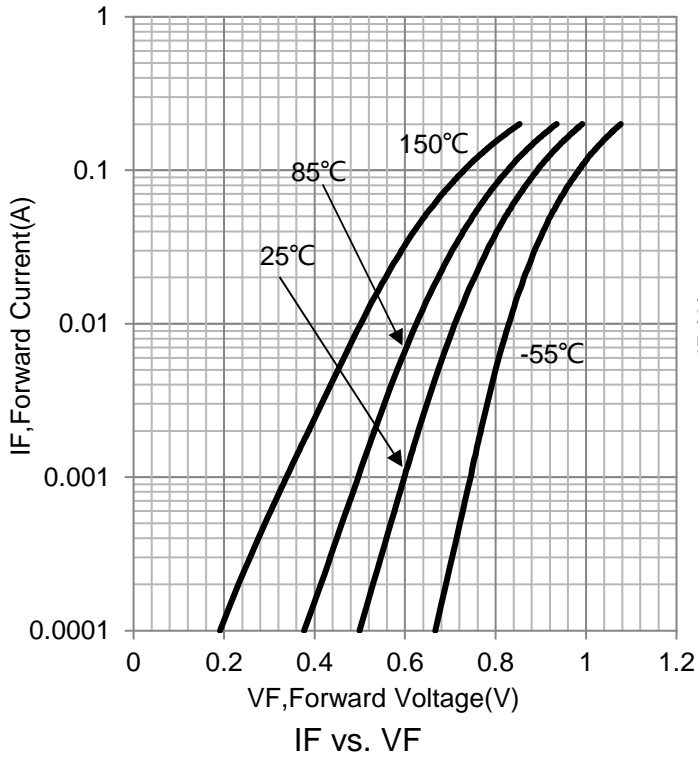
3.For each individual diode while the second diode is unbiased.



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (IF) of 10 mA.
 2. Input pulse is adjusted so IR(peak) is equal to 10 mA.
 3. tp » trr

Figure 1. Recovery Time Equivalent Test Circuit

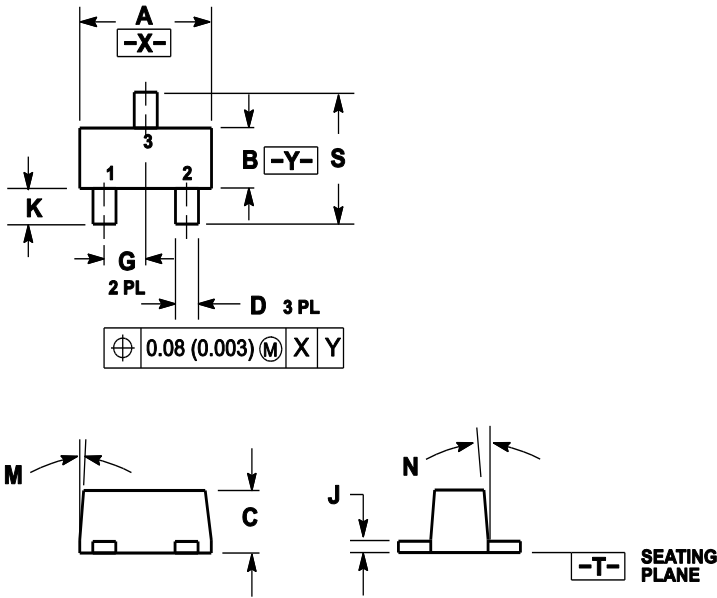
6.ELECTRICAL CHARACTERISTICS CURVES



7. OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



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	0.50BSC			0.020BSC		
H	0.53REF			0.021REF		
J	0.10	0.15	0.20	0.004	0.006	0.008
K	0.30	0.40	0.50	0.012	0.016	0.02
L	1.10REF			0.043REF		
M	---	---	10°	---	---	10°
N	---	---	10°	---	---	10°
S	1.50	1.60	1.70	0.059	0.063	0.067

8. SOLDERING FOOTPRINT

