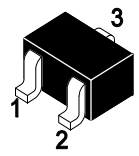
Dual Switching Diodes

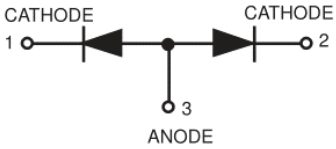
BAW56WT1G,S-BAW56WT1G

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.



SC70(SOT-323)



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAW56WT1G	A1	3000/Tape&Reel
BAW56WT3G	A1	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

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(Ta = 25ºC)

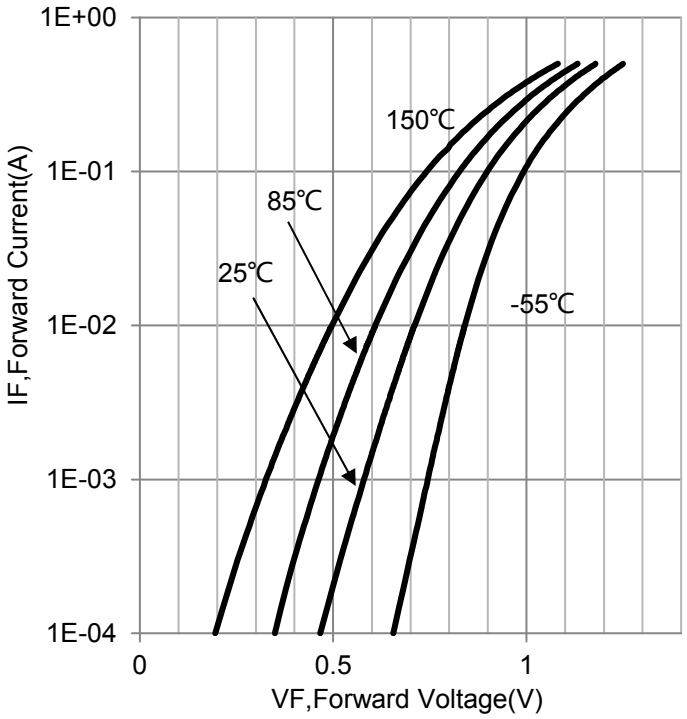
Parameter	Symbol	Limits	Unit
Total Device Dissipation FR–5 Board (Note 1) TA = 25°C Derate above 25°C	PD	200 1.6	mW mW/°C
Thermal Resistance, Junction to Ambient	RθJA	625	°C/W
Total Device Dissipation Alumina Substrate (Note 2) TA = 25°C Derate above 25°C	PD	300 2.4	mW mW/°C
Thermal Resistance, Junction to Ambient	RθJA	417	°C/W
Junction and Storage Temperature	TJ,Tstg	-55~+150	℃

1. FR–5 = 1.0 × 0.75 × 0.062 in.
2. Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.

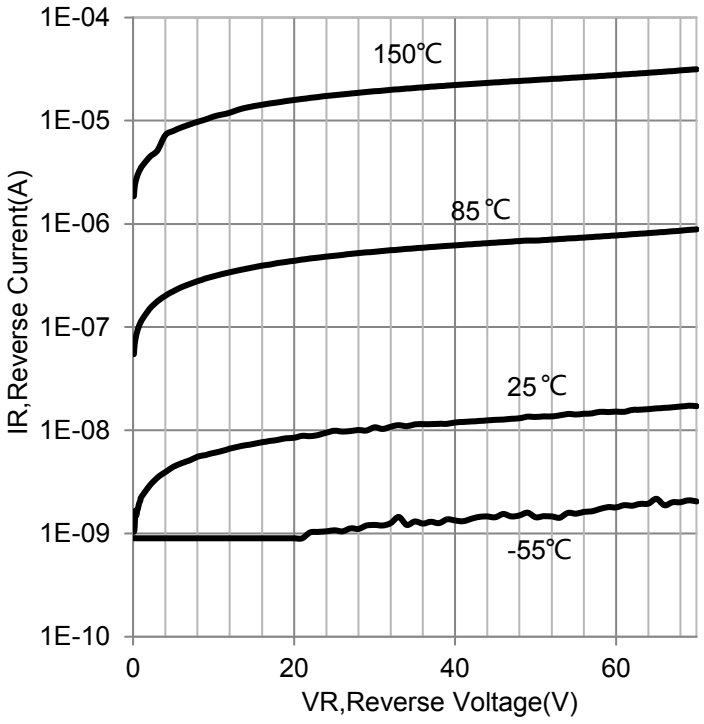
5. ELECTRICAL CHARACTERISTICS (Ta= 25℃)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (I(BR) = 100 μA)	V(BR)R	70	-	-	V
Reverse Leakage Current (VR = 25 V, TJ = 150°C) (VR = 70 V) (VR = 70 V, TJ = 150°C)	IR	- - -	- - -	30 2.5 50	μA
Diode Capacitance (VR = 0, f = 1.0 MHz)	CD	-	-	2	pF
Forward Voltage (IF = 1 mA) (IF = 10 mA) (IF = 50 mA) (IF = 150 mA)	VF	- - - -	- - - -	715 855 1000 1250	mV
Reverse Recovery Time (IF=IR=10 mA,RL=100Ohm, IR(REC) = 1.0 mA)	trr	-	-	6	nS

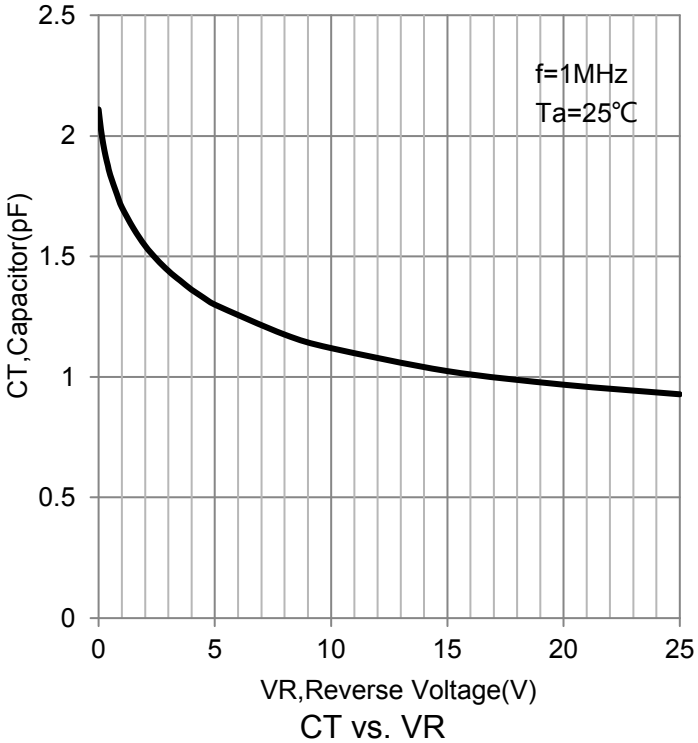
6.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

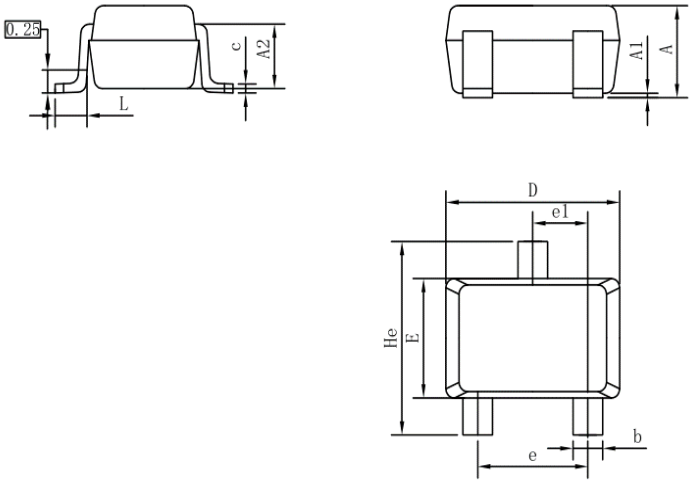


IR vs. VR



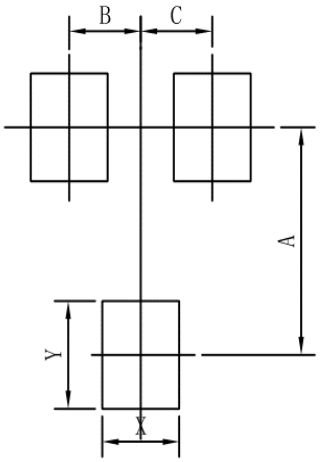
CT vs. VR

7.OUTLINE AND DIMENSIONS



SC70			
DIM	MIN	NOR	MAX
A	0.80	0.95	1.00
A1	0.00	0.05	0.10
A2		0.7 REF	
b	0.30	0.35	0.40
c	0.10	0.15	0.25
D	1.80	2.05	2.20
E	1.15	1.30	1.35
e	1.20	1.30	1.40
e1		0.65 BSC	
L	0.20	0.35	0.56
He	2.00	2.10	2.40
ALL Dimension in mm			

8.SOLDERING FOOTPRINT



SC70	
DIM	MIN
A	1.90
B	0.65
C	0.65
X	0.70
Y	0.90