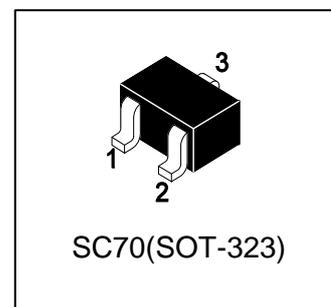


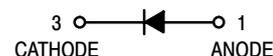
1. FEATURES

- 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
BAS16WT1G	A6	3000/Tape&Reel
BAS16WT3G	A6	10000/Tape&Reel



3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	VR	75	V
Peak Forward Current	IR	200	mA
Peak Forward Surge Current (Pulse Width = 10 μs)	IFSM	500	mA

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Power Dissipation, One Diode Loaded TA = 25°C Derate above 25°C Mounted on a Ceramic Substrate(10 x 8 x 0.6 mm)	PD	200 1.6	mW mW/°C
Thermal Resistance, Junction to Ambient One Diode Loaded Mounted on a Ceramic Substrate(10 x 8 x 0.6 mm)	RθJA	0.625	°C/mW
Junction and Storage Temperature	TJ , Tstg	-55~+150	°C

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	Symbol	Min	Max	Unit
Forward voltage (IF =1mA)	VF	-	715	mV
(IF =10mA)		-	855	
(IF =50mA)		-	1000	
(IF =150mA)		-	1250	
Reverse Current (VR=75V)	IR	-	1	μA
(VR=75V, TJ = 150°C)		-	50	
(VR=25V, TJ = 150°C)		-	30	
Diode capacitance (f=1MHz,VR =0)	Cd	-	2	pF
Reverse Recovery Time (Figure 1) (IF = IR = 10mA, RL = 50Ω)	Trr	-	6	nS
Stored Charge (Figure 2) (IF = 10 mA to VR = 6.0V, RL = 500Ω)	QS	-	45	pC
Forward Recovery Voltage (Figure 3) (IF = 10 mA, tr = 20ns)	VFR	-	1.75	V

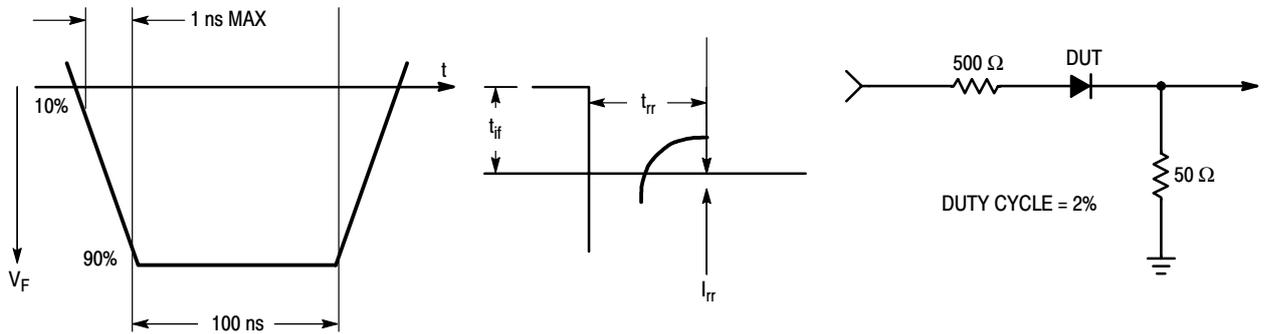


Figure 1. Reverse Recovery Time Equivalent Test Circuit

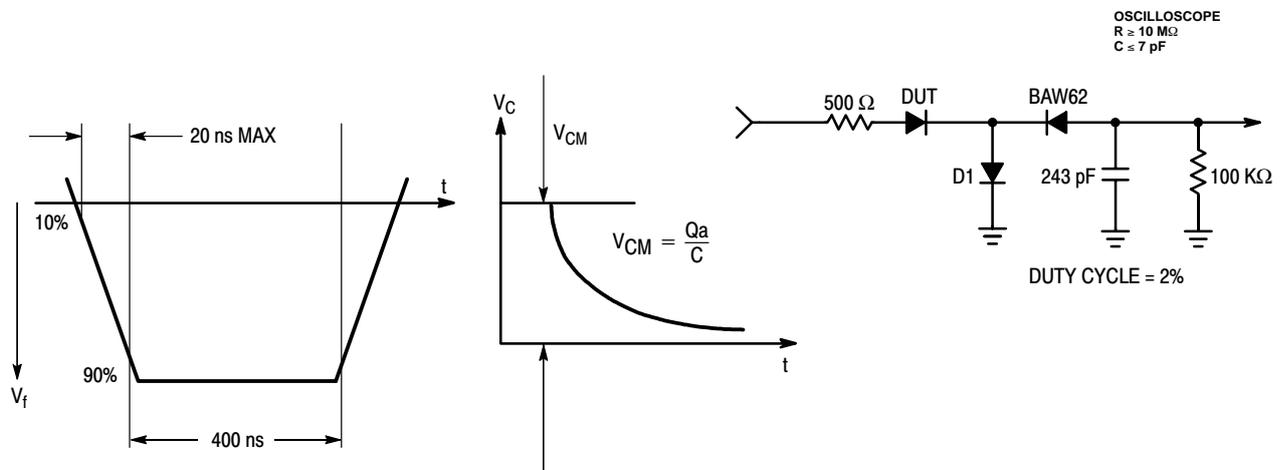


Figure 2. Recovery Charge Equivalent Test Circuit

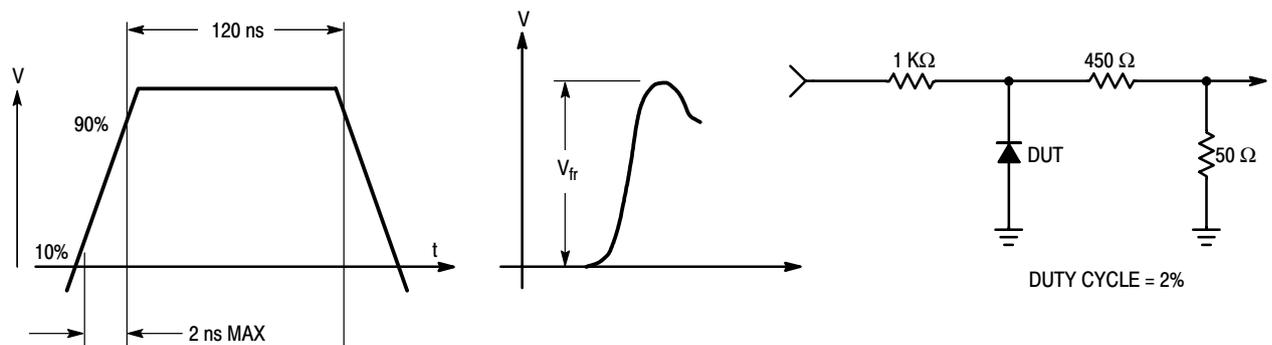
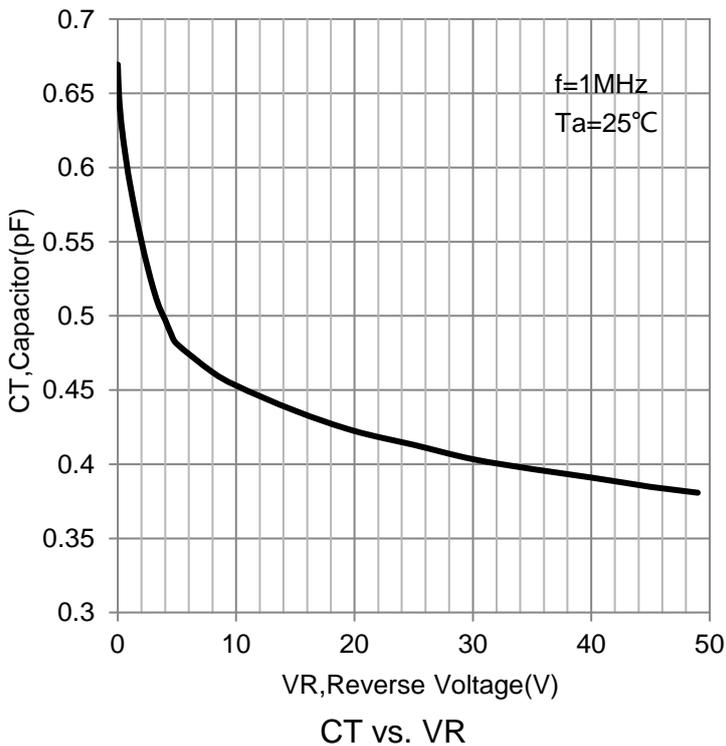
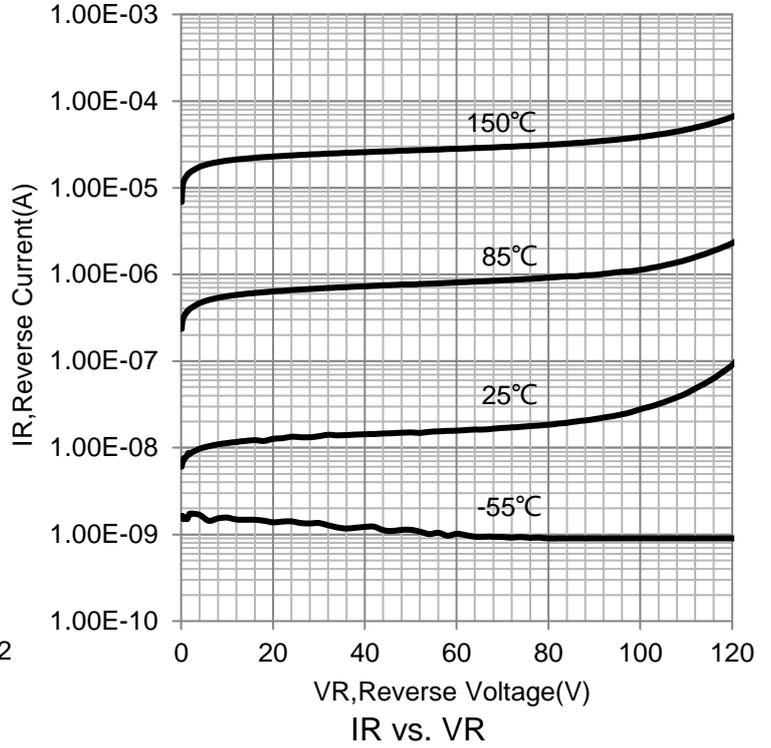
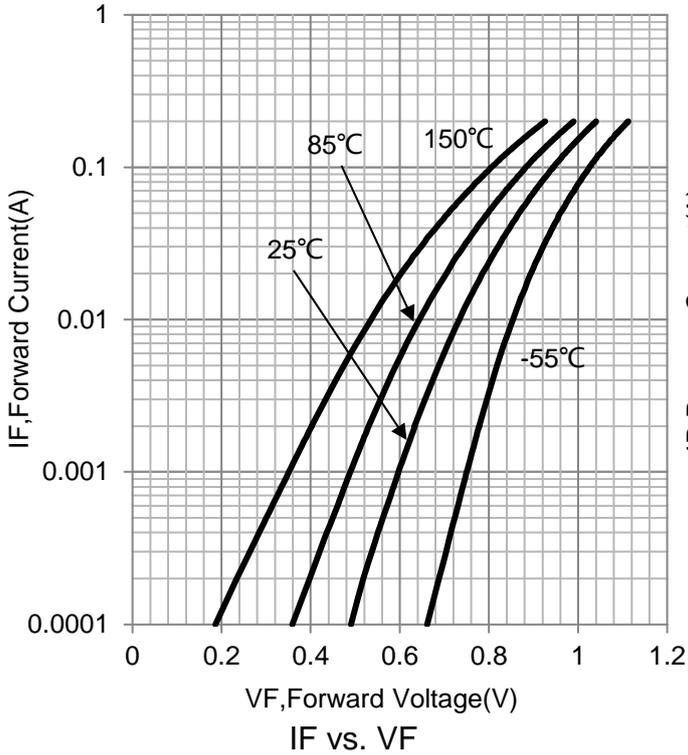
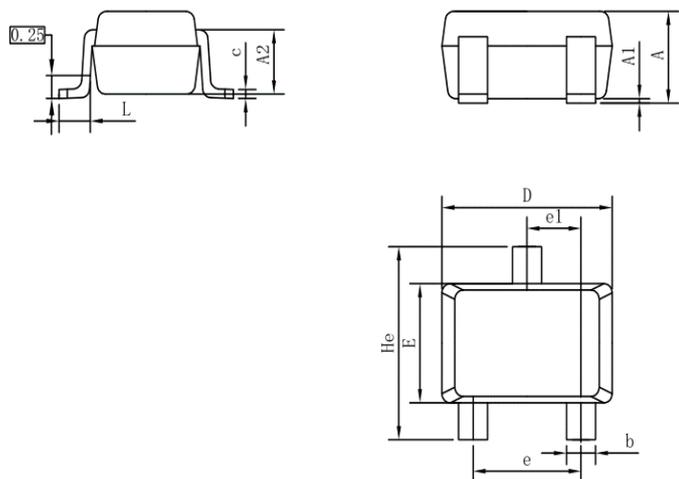


Figure 3. Forward Recovery Voltage Equivalent Test Circuit

6. ELECTRICAL CHARACTERISTICS CURVES

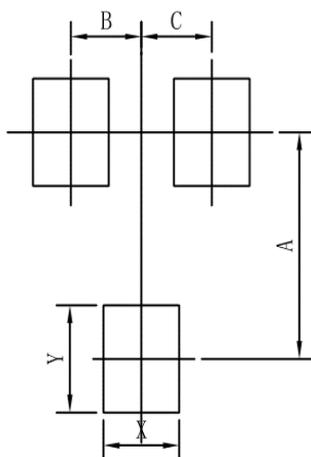


7. OUTLINE AND DIMENSIONS



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