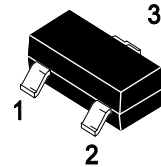
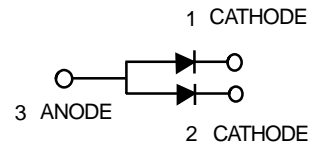




### BAW56 Ultra High Speed Switching Application

#### 1. FEATURES

- Low forward voltage :  $V_F(3) = 0.90V$  (typ.)
- Fast reverse recovery time :  $t_{rr} = 1.8ns$  (typ.)
- Small total capacitance :  $C_T = 2.3pF$  (typ.)
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



#### 2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
BAW56	A1	3000/Tape&Reel

SOT23

#### 3. MAXIMUM RATINGS( $T_a = 25^{\circ}C$ )

Parameter	Symbol	Limits	Unit
Maximum (peak) reverse voltage	VRM	85	V
Reverse voltage	VR	80	V
Maximum (peak) forward current	IFM	300(Note 1)	mA
Average forward current	IO	100(Note 1)	mA
Surge current (10ms)	IFSM	2(Note 1)	A
Power dissipation	P	150	mW
Junction temperature	Tj	125	$^{\circ}C$
Storage temperature range	Tstg	-55 to +125	$^{\circ}C$

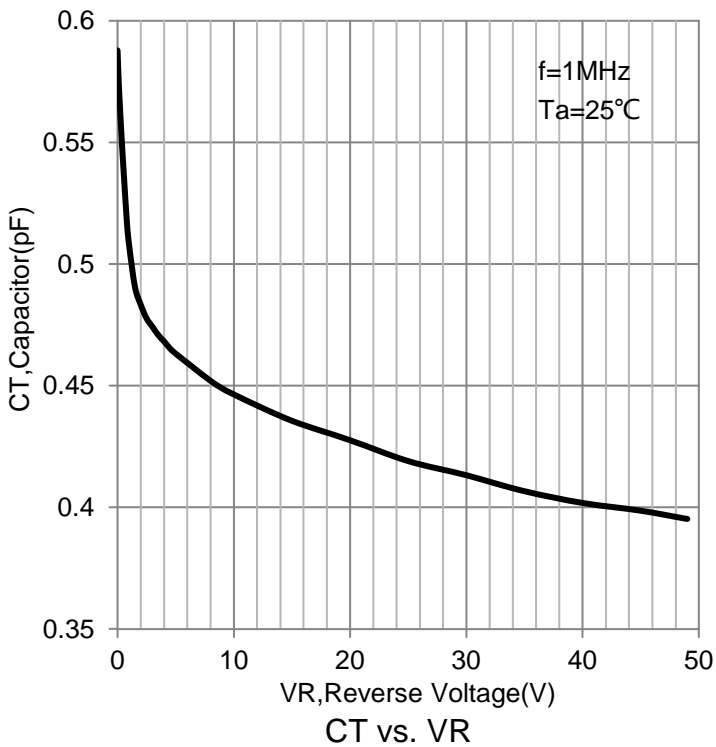
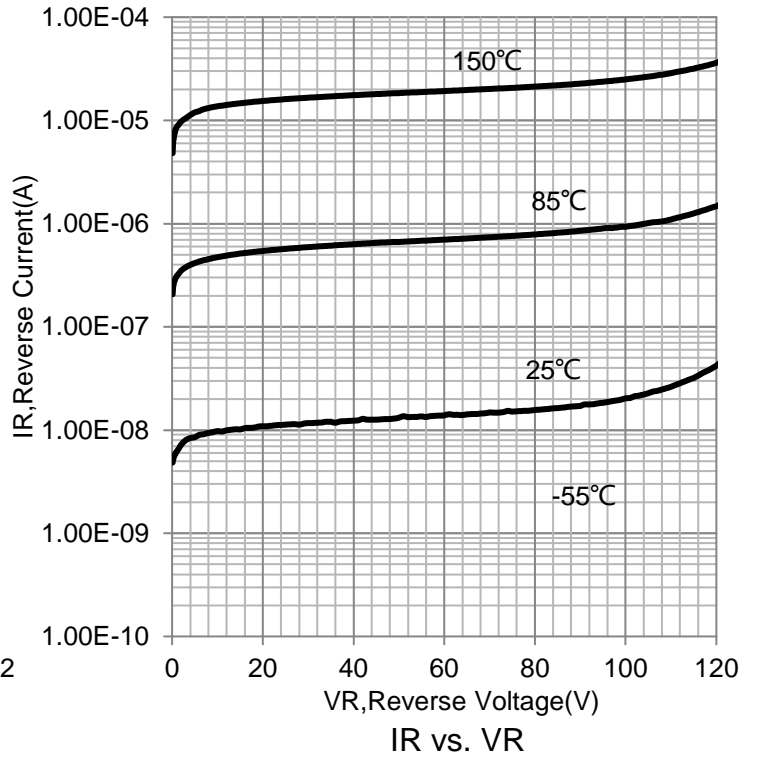
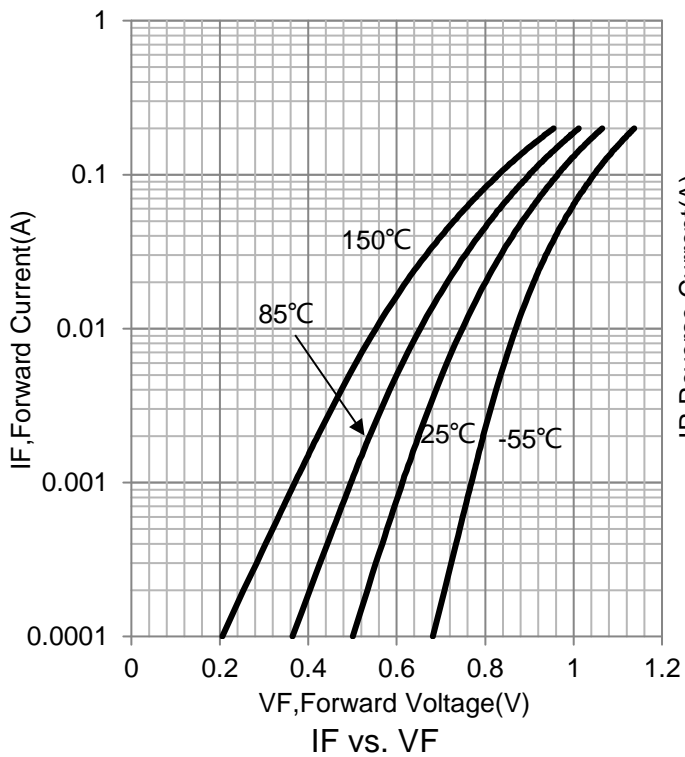
1. Unit rating. Total rating = Unit rating  $\times$  1.5.

#### 4. ELECTRICAL CHARACTERISTICS ( $T_a = 25^{\circ}C$ )

CHARACTERISTICS	Symbol	Min	Typ.	Max	Unit
Forward voltage ( $I_F = 1mA$ )	VF	-	0.60	-	V
( $I_F = 10mA$ )		-	0.75	-	
( $I_F = 100mA$ )		-	0.9	1.2	
Reverse current ( $V_R = 30V$ )	IR	-	-	0.1	$\mu A$
( $V_R = 80V$ )		-	-	0.5	
Total capacitance ( $f = 1MHz, V_R = 0$ )	CT	-	2.3	4	pF
Reverse Recovery Time ( $I_F = 10mA$ )	Trr	-	1.8	4	nS



## 5. ELECTRICAL CHARACTERISTICS CURVES

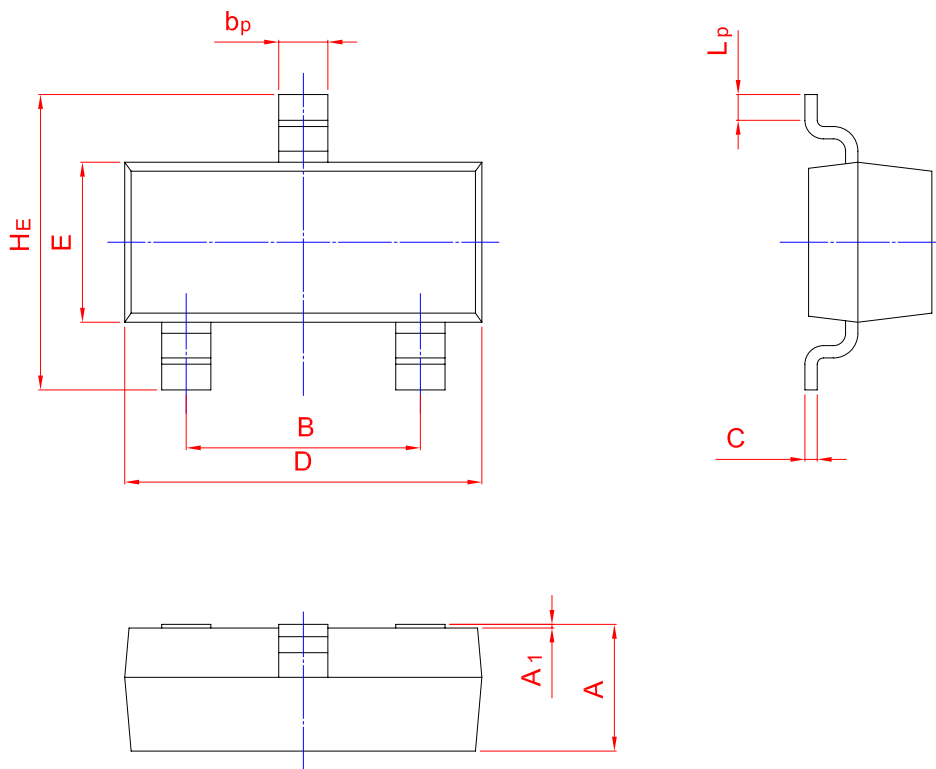
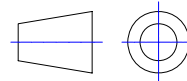




## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20