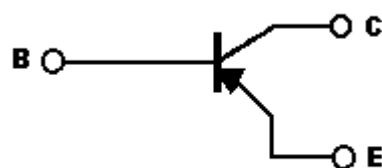
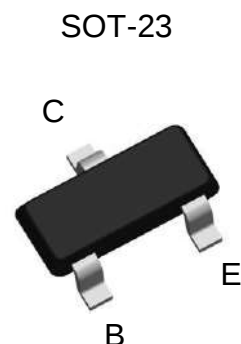


PNP Epitaxial Planar Transistor

Features:

- Low $V_{CE(SAT)}$, $V_{CE(SAT)} = -0.16V$ (Typ.) @ $I_C/I_B = -500mA/-50mA$
- High breakdown voltage, $BV_{CEO} = -100V$
- Pb-free and Halogen-free package
- AEC-Q101 qualified.

BV_{CEO}	-100V
I_C	-1A
$R_{CE(SAT)}$	320m Ω (typ.)



B : Base
 C : Collector
 E : Emitter

Ordering Information

Device	Package	Shipping
KWB1198	SOT-23 (Pb-free lead plating and halogen-free package)	3000 pcs / tape & reel

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	-100	V
Collector-Emitter Voltage	V _{CEO}	-100	V
Emitter-Base Voltage	V _{EBO}	-8	V
Collector Current	I _C	-1	A
Power Dissipation (T _A =25°C)	P _D	225 (Note)	mW
Power Dissipation (T _C =25°C)	P _D	560	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	556 (Note)	°C/W
Thermal Resistance, Junction to Case	R _{θJC}	223	°C/W
Operating Junction Temperature Range	T _j	-55~+150	°C
Storage Temperature Range	T _{stg}	-55~+150	°C

Note : Free air condition

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	-100	-	-	V	I _C =-50μA
BV _{CEO}	-100	-	-	V	I _C =-2mA
BV _{EBO}	-8	-	-	V	I _E =-50μA
I _{CBO}	-	-	-100	nA	V _{CB} =-100V
I _{EBO}	-	-	-100	nA	V _{EB} =-7V
*V _{CE(sat)}	-	-0.16	-0.3	V	I _C =-500mA, I _B =-50mA
*R _{CE(sat)}	-	-0.32	-0.6	Ω	I _C =-500mA, I _B =-50mA
*h _{FE}	180	-	390	-	V _{CE} =-3V, I _C =-0.1A
f _T	-	200	-	MHz	V _{CE} =-10V, I _C =-50mA, f=100MHz
C _{ob}	-	11	20	pF	V _{CB} =-10V, f=1MHz

*Pulse Test: Pulse Width ≤380μs, Duty Cycle ≤2%

Classification Of h_{FE}

Rank	R
Range	180~390

Moisture Sensitivity Level : conform to JEDEC level 1

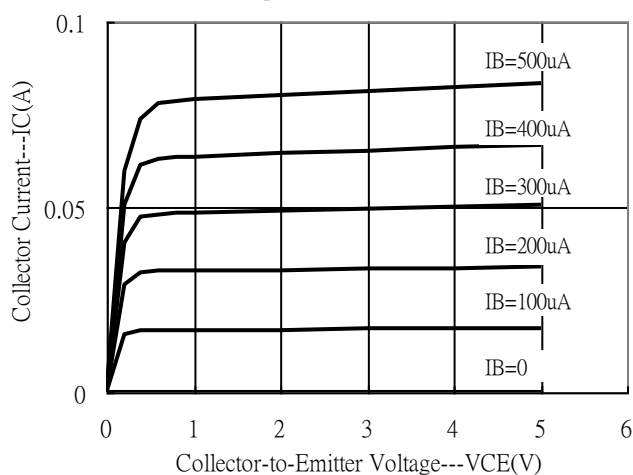
Recommended Storage Condition:

Temperature : ≤ 30 °C

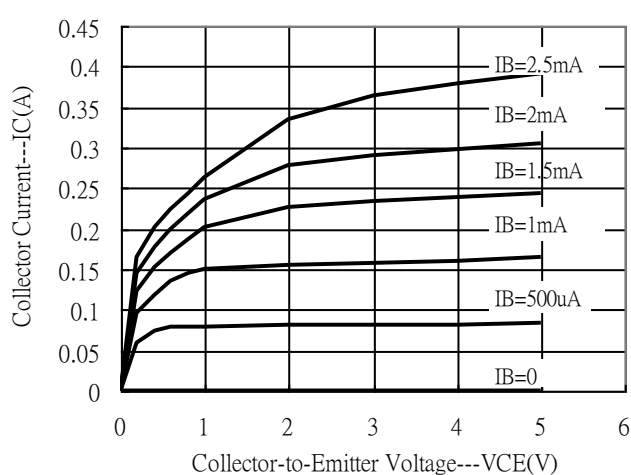
Humidity : ≤ 60% RH

Typical Characteristics

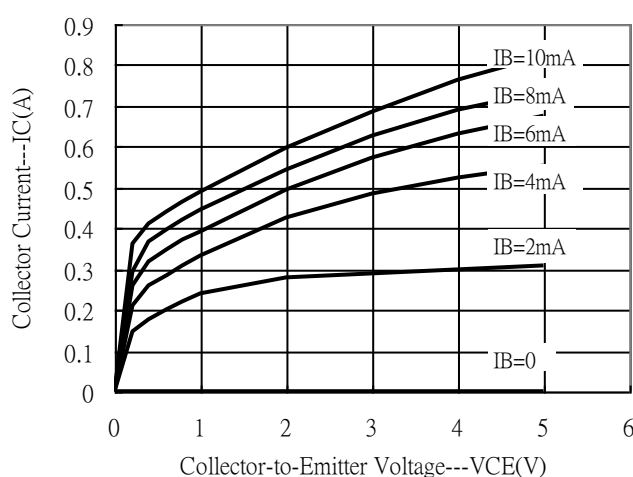
Output Characteristics



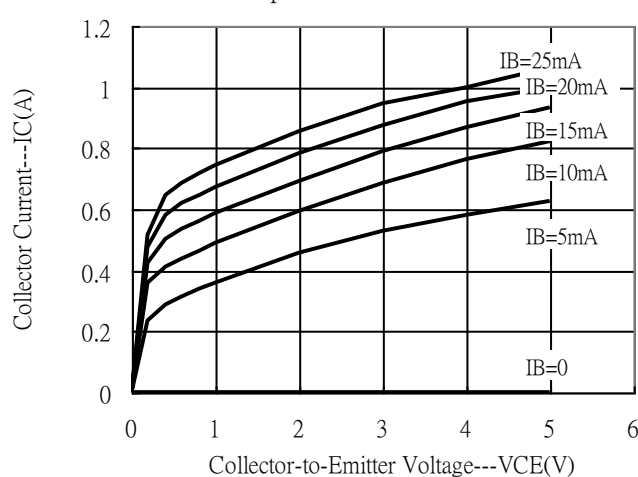
Output Characteristics



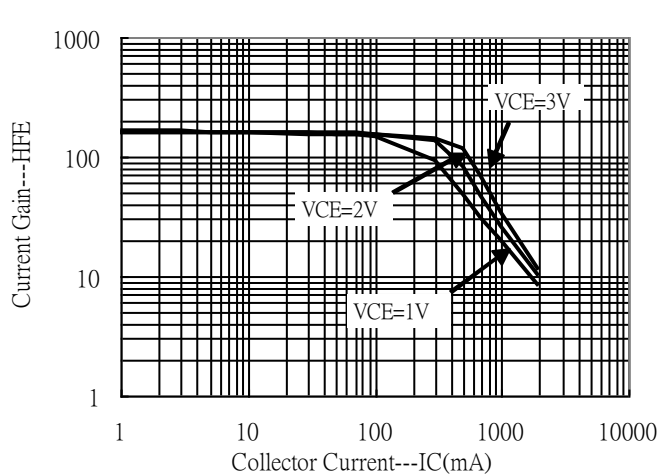
Output Characteristics



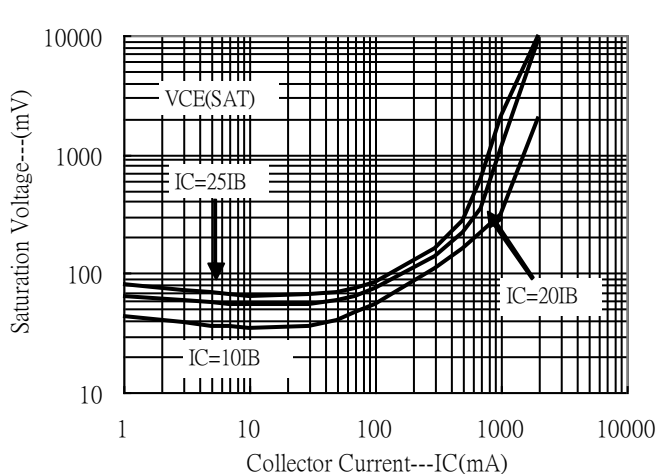
Output Characteristics



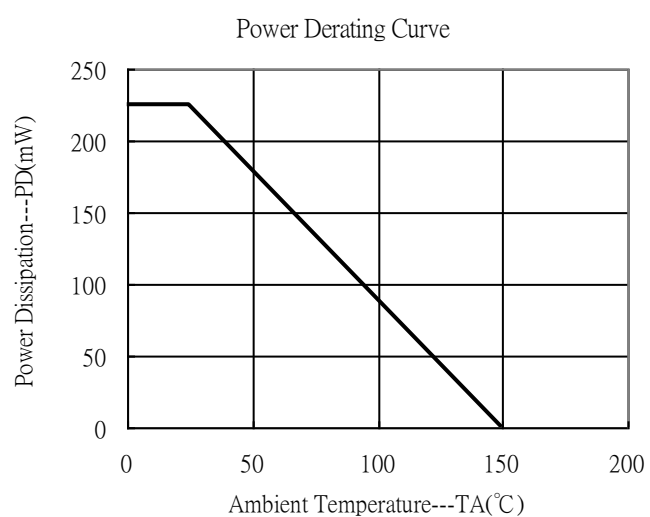
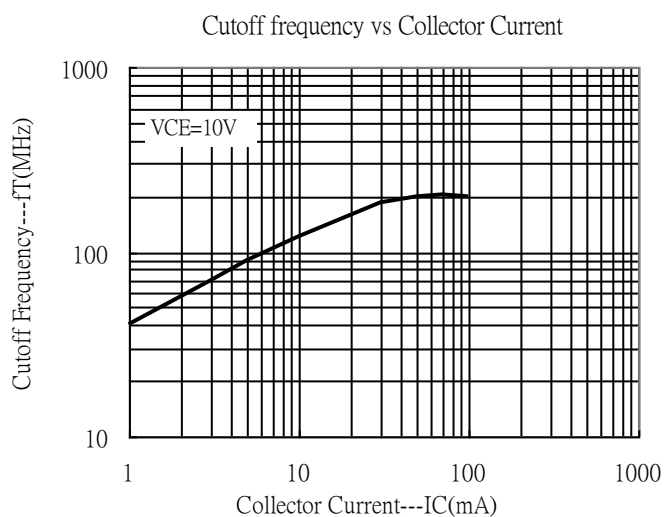
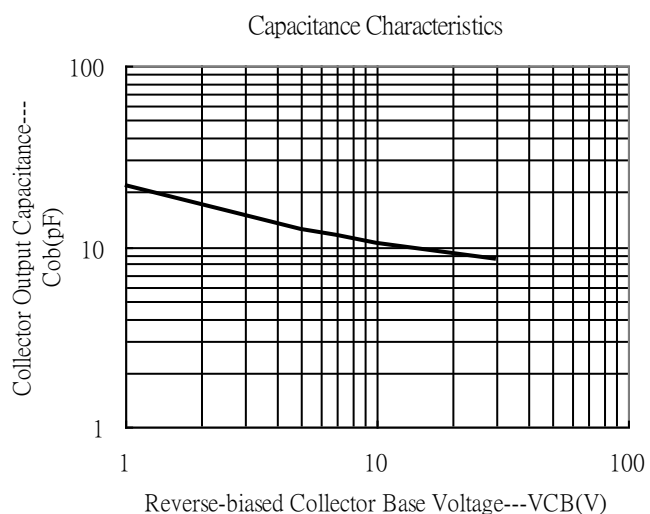
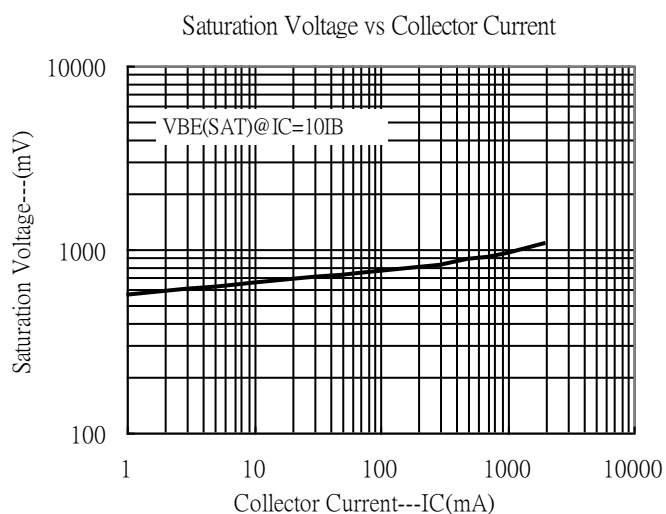
Current Gain vs Collector Current



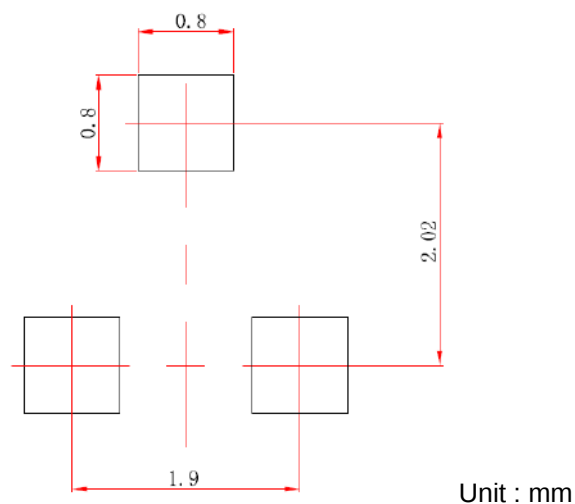
Saturation Voltage vs Collector Current



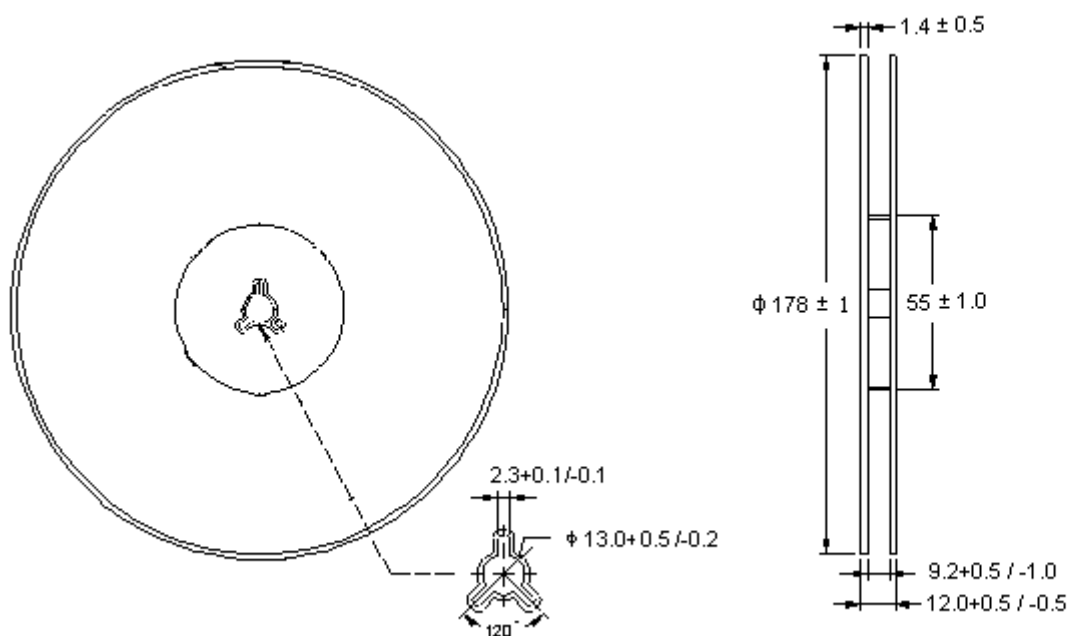
Typical Characteristics(Cont.)



Recommended Soldering Footprint

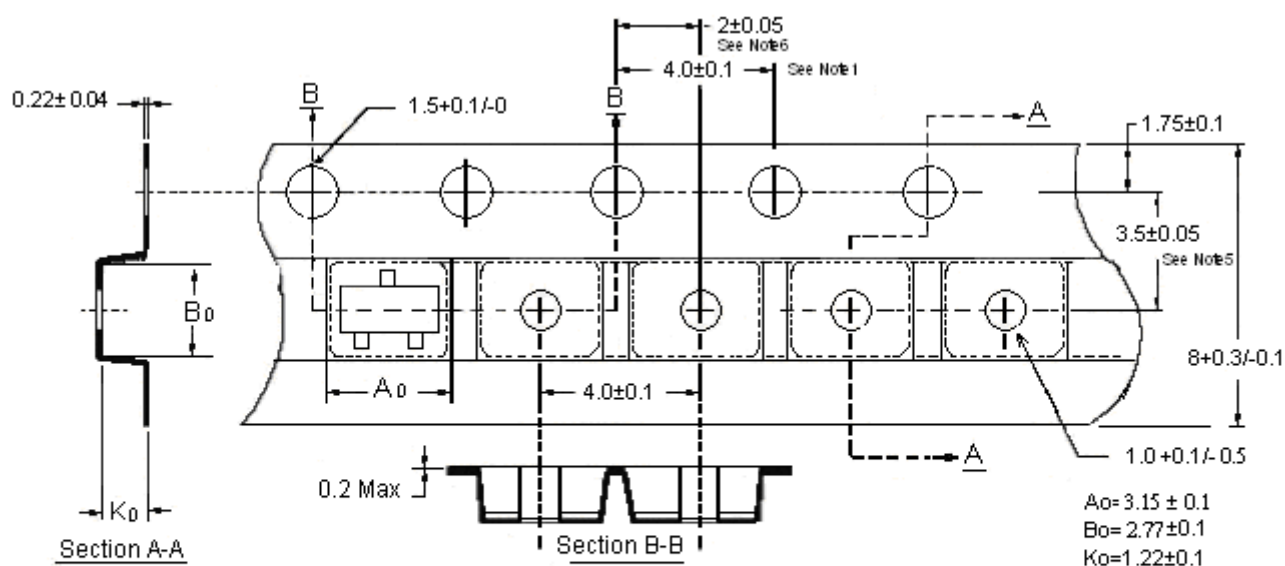


Reel Dimension



Unit: millimeter

Carrier Tape Dimension

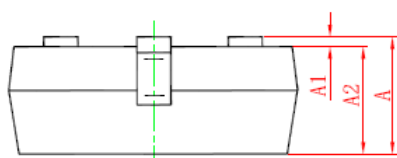
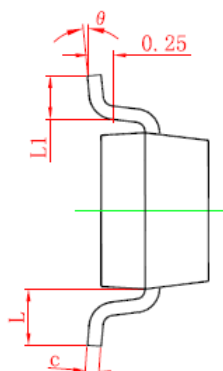
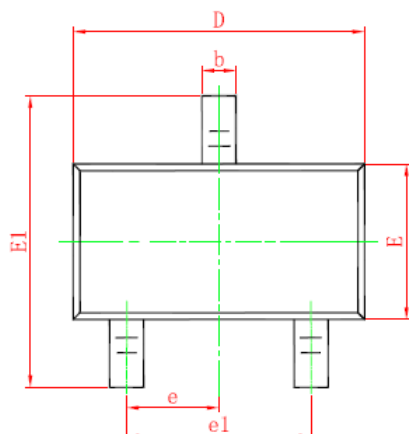


Notes:

1. 10 sprocket hole pitch cumulative tolerance ± 0.2 .
2. Camber not to exceed 1mm in 100mm.
3. Material : conductive Black Polystyrene.
4. A_0 & B_0 measured on a plane 0.3mm above the bottom of the pocket.
5. K_0 measured from a plane on the inside bottom of the pocket to the top surface of the carrier.
6. Pocket position relative to sprocket hole measured as true position of pocket, not pocket hole.

Unit : millimeter

SOT-23 Dimension



Marking:

Product Code

Date Code: Year+Month
 Year: 1→2021, 2→2022
 Month: 1→1, 2→2, . . .
 9→9, A→10, B→11, C→12

3-Lead SOT-23 Plastic
 Surface Mounted Package

Style : Pin 1.Base 2.Emitter 3.Collector

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.035	0.045	0.900	1.150	E1	0.089	0.100	2.250	2.550
A1	0.000	0.004	0.000	0.100	e	0.037 TYP.		0.950 TYP.	
A2	0.035	0.041	0.900	1.050	e1	0.071	0.079	1.800	2.000
b	0.012	0.020	0.300	0.500	L	0.022 REF.		0.550 REF.	
c	0.003	0.006	0.080	0.150	L1	0.012	0.020	0.300	0.500
D	0.110	0.118	2.800	3.000	θ	0°	8°	0°	8°
E	0.047	0.055	1.200	1.400					