

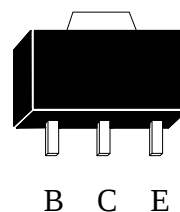
General Purpose PNP Epitaxial Planar Transistor

Features:

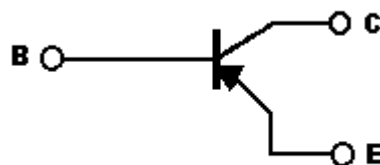
- High breakdown voltage, $BV_{CEO} \geq -100V$
- Large continuous collector current capability
- Low collector saturation voltage
- Complementary to KWD5213M3
- Pb-free lead plating and halogen-free package

Outline

SOT-89



Symbol



B : Base
 C : Collector
 E : Emitter

Ordering Information

Device	Package	Shipping
KWB1198M3	SOT-89 (Pb-free lead plating and halogen-free package)	1000 pcs / Tape & Reel

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CB0}	-120	V
Collector-Emitter Voltage	V _{CEO}	-100	
Emitter-Base Voltage	V _{EBO}	-5	
Collector Current(DC)	I _C	-1	A
Collector Current(Pulse)	I _{CP}	-2	
Base Current(DC)	I _B	-200	mA
Power Dissipation	P _d	0.6	W
		1 (Note 1)	
		2 (Note 2)	
Thermal Resistance, Junction to Ambient	R _{θJA}	208	°C/W
		83.3 (Note 1)	
		59.5 (Note 2)	
Operating Junction Temperature Range	T _j	-65~+150	°C
Storage Temperature Range	T _{stg}	-65~+150	°C

Note : 1. When mounted on FR-4 PCB with area measuring 10×10×1 mm

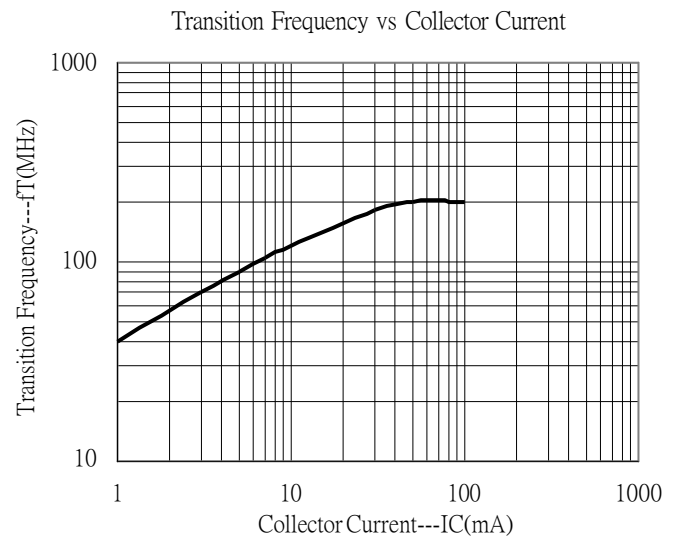
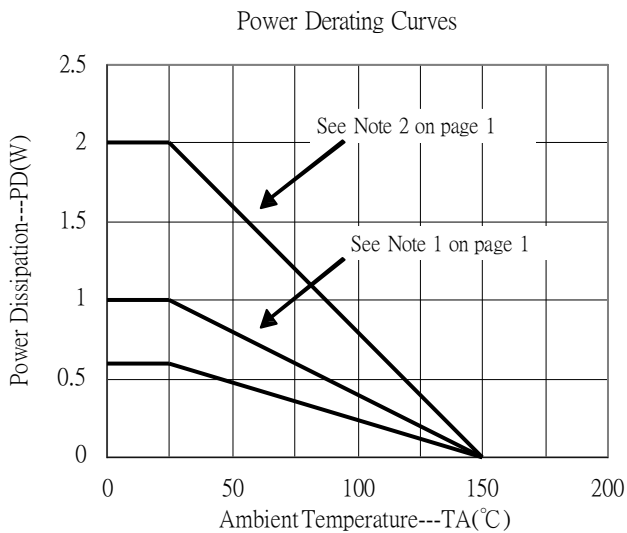
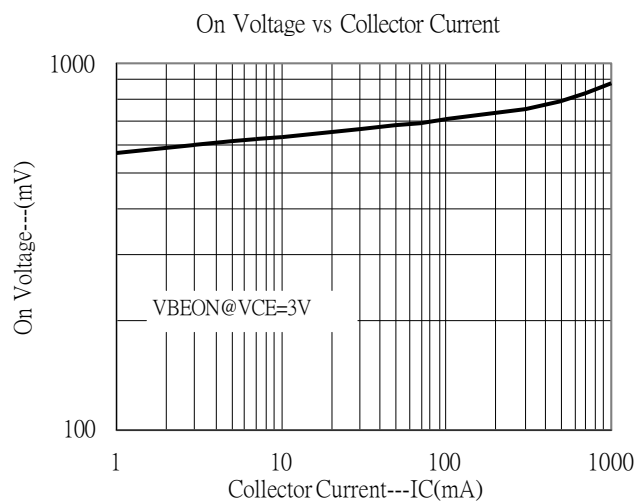
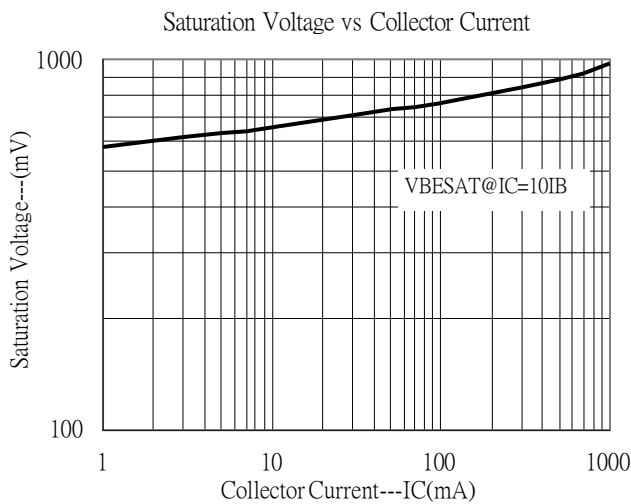
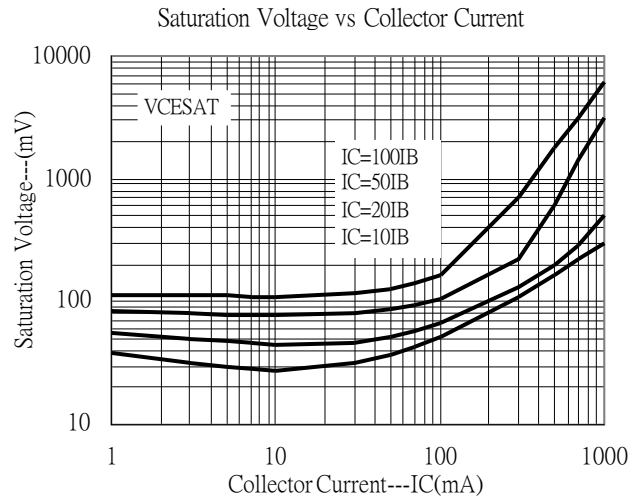
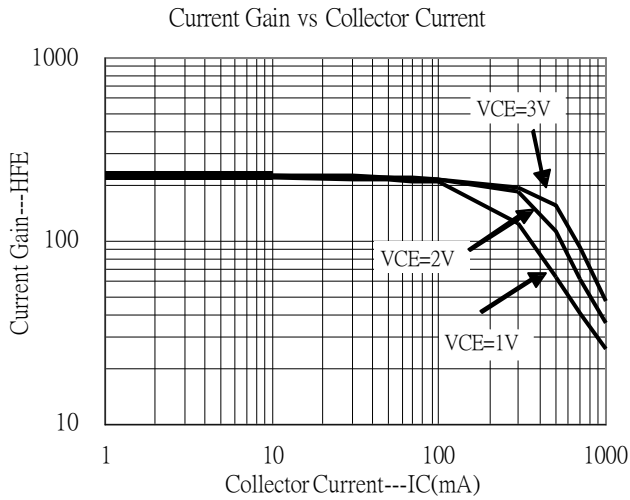
2 . When mounted on ceramic with area measuring 40×40×1 mm

Characteristics (Ta=25°C)

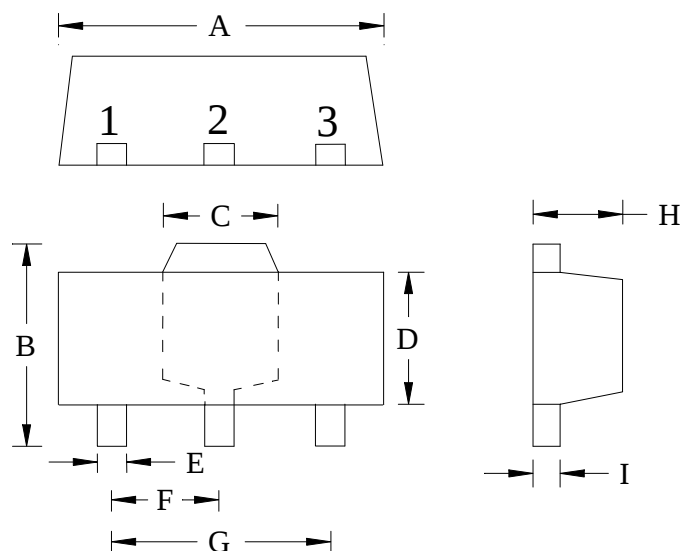
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	-120	-	-	V	I _C =-100μA
BV _{CEO}	-100	-	-	V	I _C =-10mA
BV _{EBO}	-5	-	-	V	I _E =-100μA
I _{CBO}	-	-	-100	nA	V _{CB} =-100V
I _{EBO}	-	-	-20	nA	V _{EB} =-4V
*V _{CE(sat)}	-	-0.1	-0.2	V	I _C =-250mA, I _B =-25mA
*V _{CE(sat)}	-	-0.16	-0.3	V	I _C =-500mA, I _B =-50mA
*V _{CE(sat)}	-	-0.3	-0.5	V	I _C =-1A, I _B =-100mA
*V _{BE(sat)}	-	-0.89	-1.1	V	I _C =-500mA, I _B =-50mA
*V _{BE(on)}	-	-	-1	V	V _{CE} =-5V, I _C =-1mA
*h _{FE} 1	160	-	-	-	V _{CE} =-2V, I _C =-5mA
*h _{FE} 2	180	-	390	-	V _{CE} =-2V, I _C =-150mA
*h _{FE} 3	40	-	-	-	V _{CE} =-2V, I _C =-500mA
f _T	150	200	-	MHz	V _{CE} =-10V, I _C =-50mA, f=100MHz
Cob	-	11	15	pF	V _{CB} =-10V, I _E =0A, f=1MHz

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

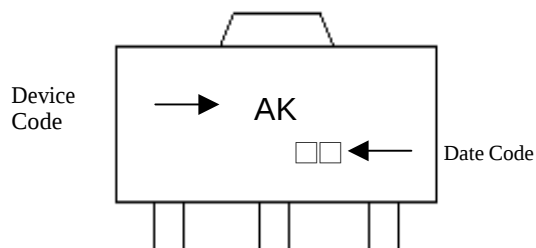
Typical Characteristics



SOT-89 Dimension



Marking:



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

3-Lead SOT-89 Plastic
 Surface Mounted Package
 Package Code: M3

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0591	TYP	1.50	TYP
B	0.1551	0.1673	3.94	4.25	G	0.1181	TYP	3.00	TYP
C	0.0610	REF	1.55	REF	H	0.0551	0.0630	1.40	1.60
D	0.0906	0.1024	2.30	2.60	I	0.0138	0.0173	0.35	0.44
E	0.0126	0.0205	0.32	0.52					