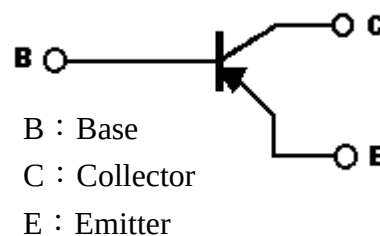
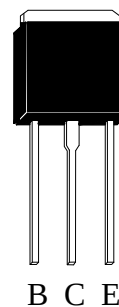


Silicon PNP Epitaxial Planar Transistor

Description:

- High BV_{CEO}
- High current capability
- RoHS compliant package
- Pb-free lead plating and halogen-free package

TO-251



Ordering Information

Device	Package	Shipping
KIB1236A	TO-251 (Pb-free lead plating and halogen-free package)	80 pcs/tube, 50 tubes/box

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CB0}	-180	V
Collector-Emitter Voltage	V _{CEO}	-160	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current (DC)	I _C	-1.5	A
Collector Current (Pulse)	I _{CP}	-3 (Note)	A
Power Dissipation	P _D	1	W
		10	W
Operating Junction Temperature Range	T _j	-55~+150	°C
Storage Temperature Range	T _{stg}	-55~+150	°C

Note : Single Pulse P_w ≤ 350μs, Duty ≤ 2%.

Thermal Data

Parameter	Symbol	Value	Unit
Thermal Resistance, Junction-to-case, max	R _{th,j-c}	12.5	°C/W
Thermal Resistance, Junction-to-ambient, max	R _{th,j-a}	125	°C/W

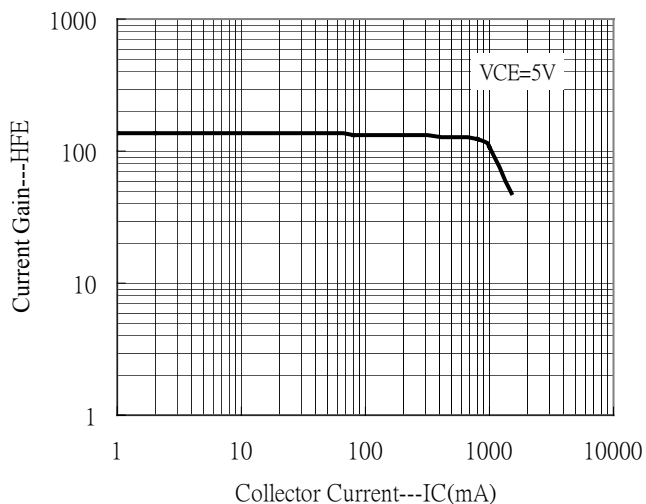
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	-180	-	-	V	I _C =-50μA, I _E =0
BV _{CEO}	-160	-	-	V	I _C =-1mA, I _B =0
BV _{EBO}	-5	-	-	V	I _E =-50μA, I _C =0
I _{CB0}	-	-	-1	μA	V _{CB} =-160V, I _E =0
I _{EBO}	-	-	-1	μA	V _{EB} =-4V, I _C =0
*V _{CE(sat)}	-	-	-0.6	V	I _C =-1A, I _B =-100mA
*V _{BE(on)}	-	-	-1.5	V	V _{CE} =-5V, I _C =-150mA
h _{FE1}	180	-	390	-	V _{CE} =-5V, I _C =-100mA
h _{FE2}	80	-	-	-	V _{CE} =-5V, I _C =-500mA
f _T	-	180	-	MHz	V _{CE} =-5V, I _C =-150mA
Cob	-	24	-	pF	V _{CB} =-10V, I _E =0, f=1MHz

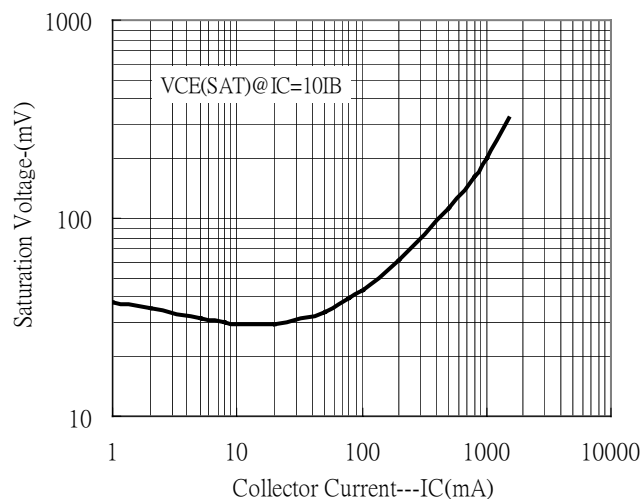
*Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Typical Characteristics

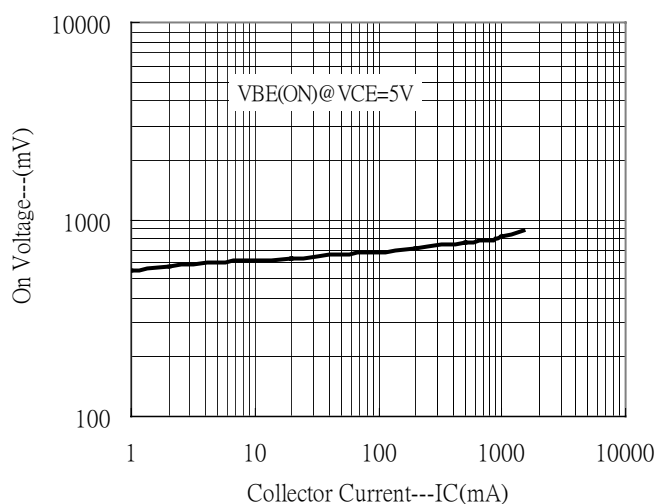
Current Gain vs Collector Current



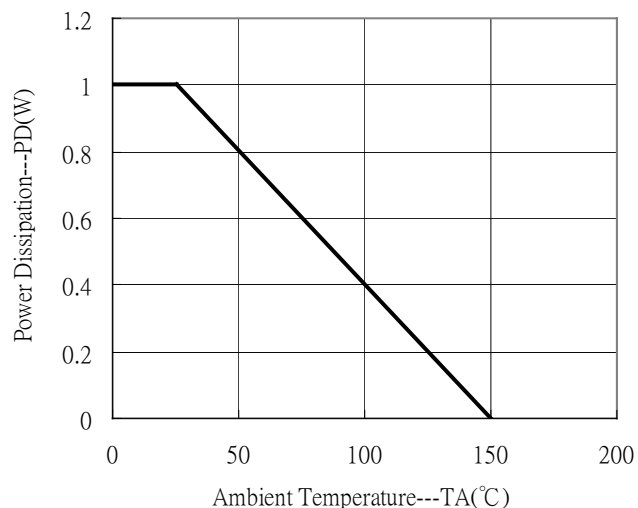
Saturation Voltage vs Collector Current



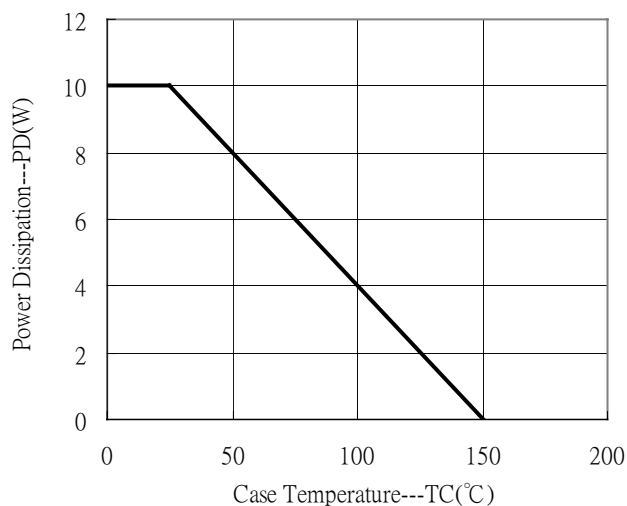
On Voltage vs Collector Current



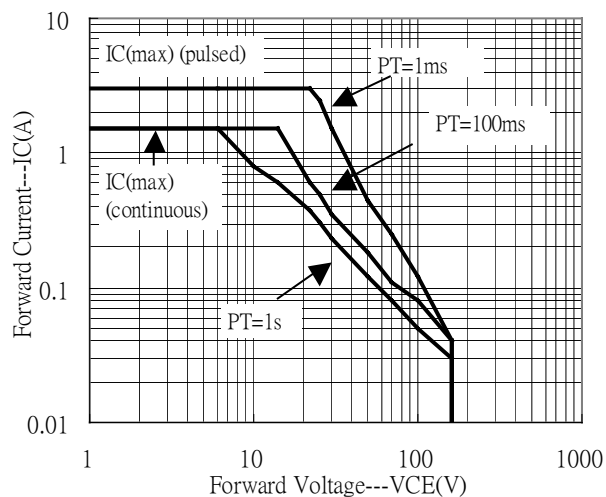
Power Derating Curve



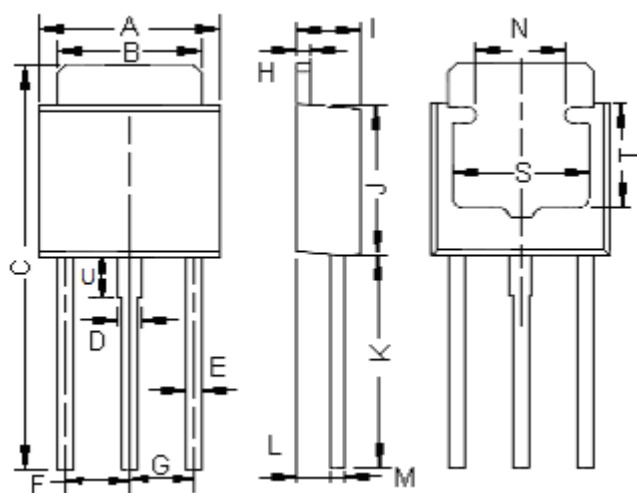
Power Derating Curve



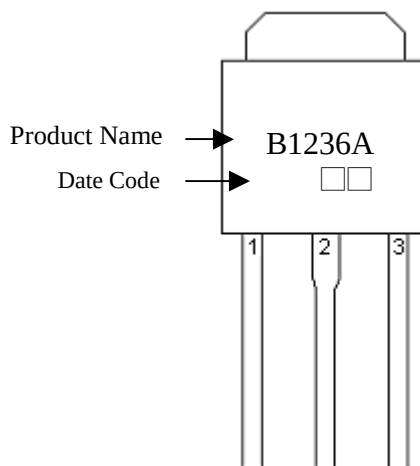
Safe Operating Area



TO-251 Dimension



Marking:



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

3-Lead TO-251 Plastic Package

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.250	0.262	6.350	6.650	J	0.213	0.224	5.400	5.700
B	0.205	0.213	5.200	5.400	K	0.295	0.311	7.500	7.900
C	0.571	0.587	14.500	14.900	L	0.042	0.054	1.050	1.350
D	0.028	0.035	0.700	0.900	M	0.017	0.023	0.430	0.580
E	0.020	0.028	0.500	0.700	N	0.118 REF		3.000	REF
F	0.091 TYP		2.300 TYP		S	0.197 REF		5.000	REF
G	0.091 TYP		2.300 TYP		T	0.150 REF		3.800	REF
H	0.017	0.023	0.430	0.580	U	0.055 REF		1.400	REF
I	0.087	0.094	2.200	2.400					