

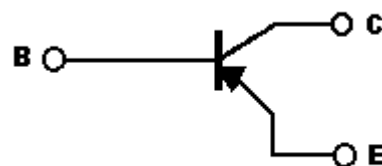
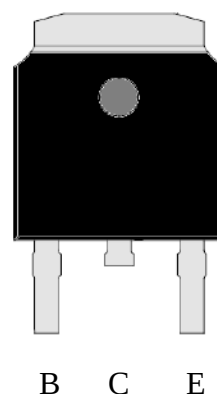
Silicon PNP Epitaxial Planar Transistor

Description:

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

BV_{CEO}	-160V
I_C	-1.5A
$R_{CESAT(MAX)}$	600mΩ

TO-252(DPAK)



B : Base
C : Collector
E : Emitter

Ordering Information

Device	Package	Shipping
KJB1236A	TO-252 (RoHS compliant and halogen-free package)	2500 pcs / Tape & Reel

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	-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

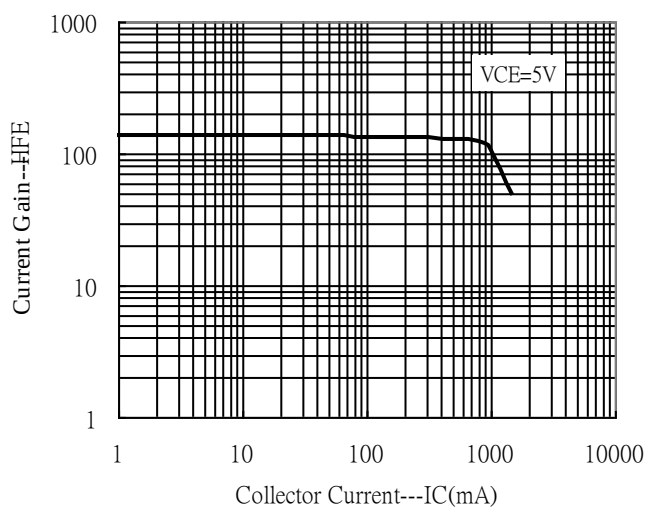
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	-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 _{CBO}	-	-	-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}	30	-	-	-	V _{CE} =-5V, I _C =-500mA
f _T	-	140	-	MHz	V _{CE} =-5V, I _C =-150mA
C _{ob}	-	27	-	pF	V _{CB} =-10V, I _E =0, f=1MHz

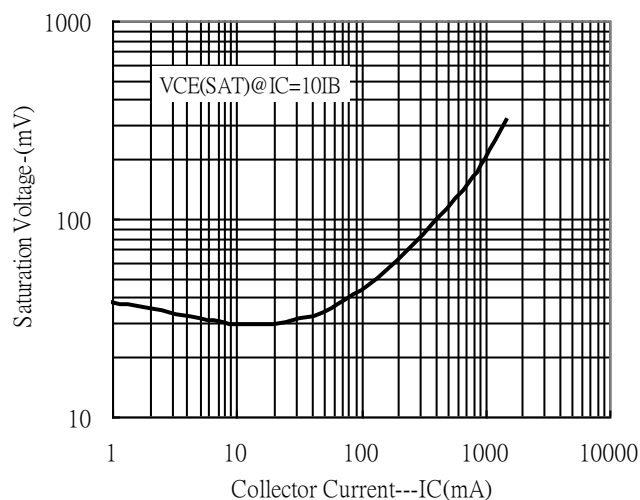
*Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Typical Characteristics

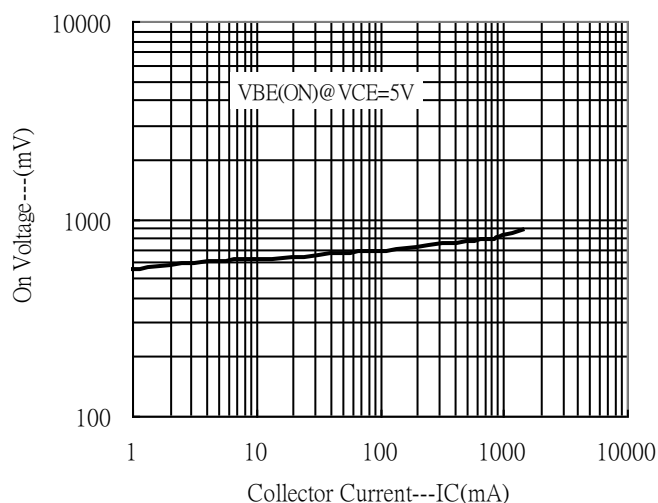
Current Gain vs Collector Current



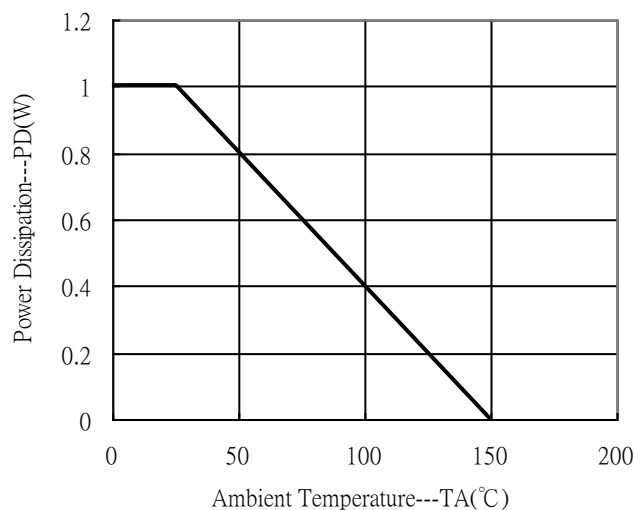
Saturation Voltage vs Collector Current



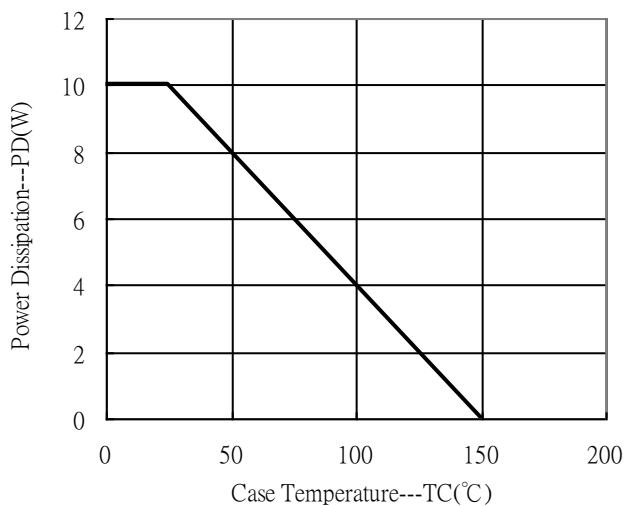
On Voltage vs Collector Current



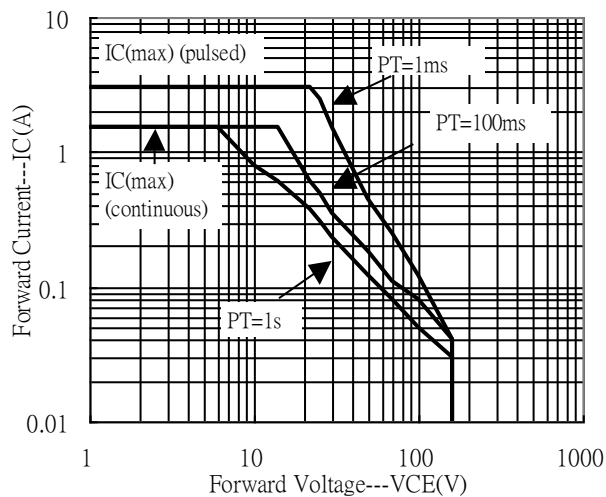
Power Derating Curve



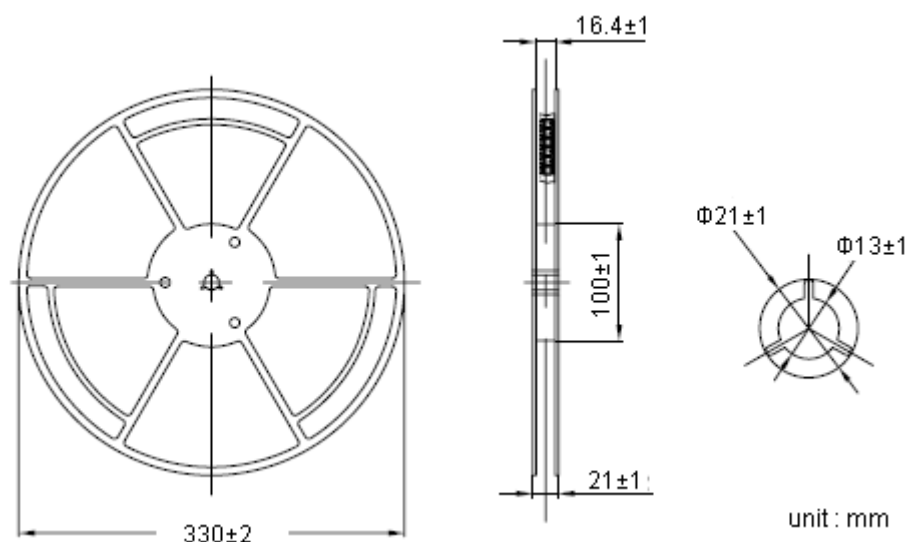
Power Derating Curve



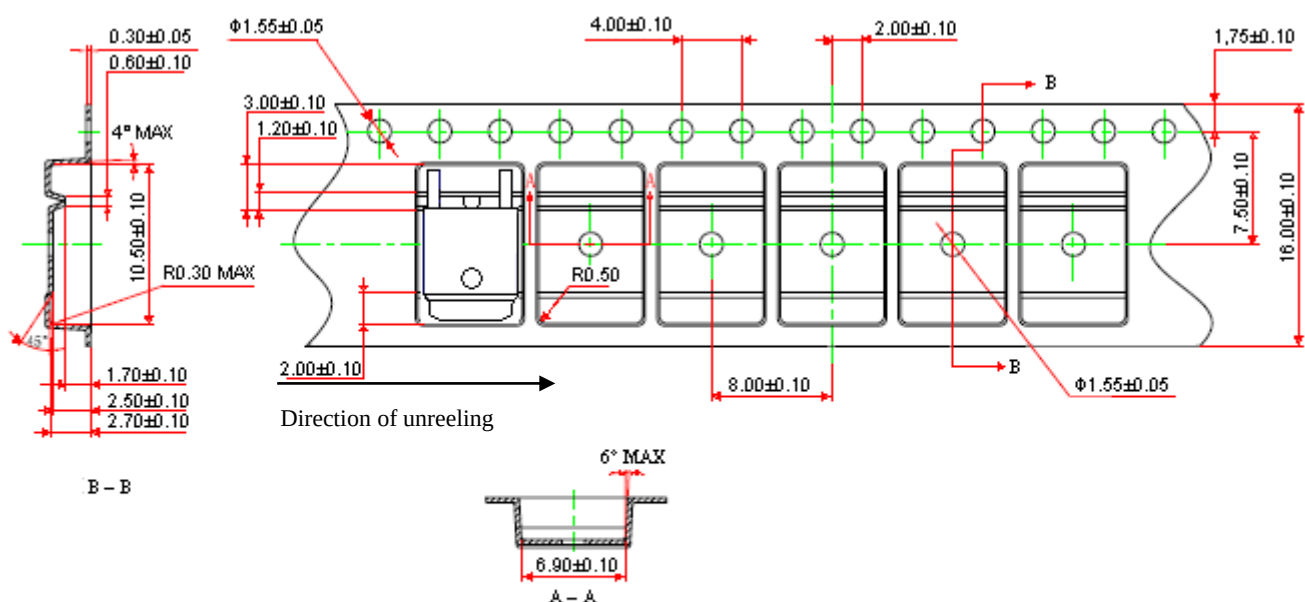
Safe Operating Area



Reel Dimension



Carrier Tape Dimension

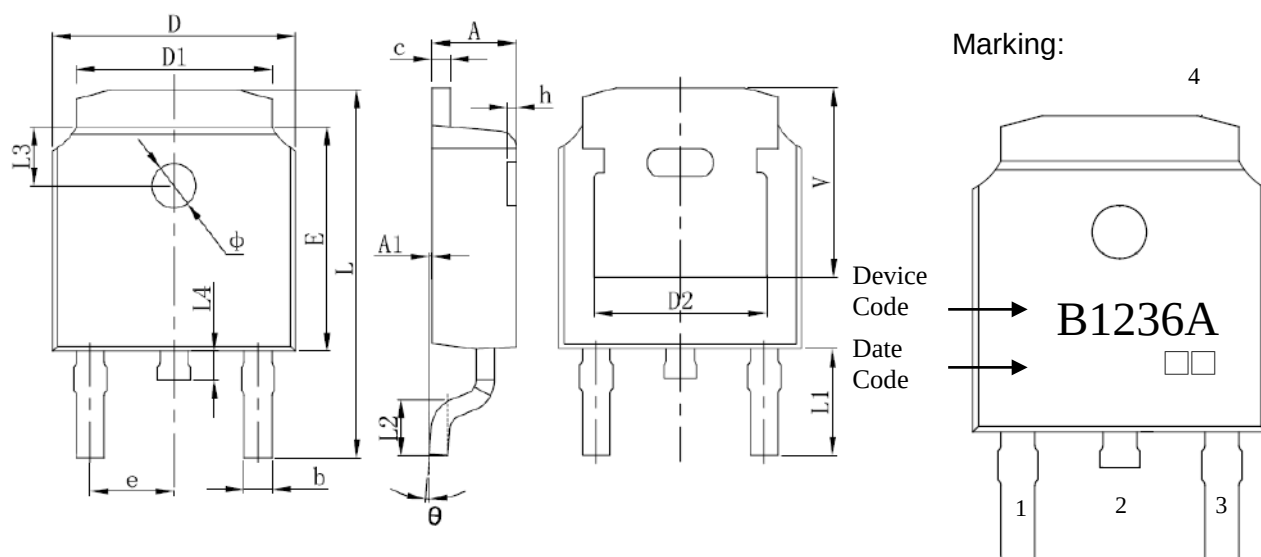


Notes:

1. 10 sprocket hole pitch cumulative tolerance ± 0.2 .
2. Camber not to exceed 1mm in 100mm.
3. Material: conductive black polystyrene, antistatic coated : $10^5 \Omega/\square \sim 10^{11} \Omega/\square$

unit : mm

TO-252 Dimension



3-Lead TO-252 Plastic Surface Mount Package

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

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.087	0.094	2.200	2.400	L	0.382	0.406	9.712	10.312
A1	0.000	0.005	0.000	0.127	L1	0.114	REF	2.900	REF
b	0.025	0.030	0.635	0.770	L2	0.055	0.067	1.400	1.700
c	0.018	0.023	0.460	0.580	L3	0.063	REF	1.600	REF
D	0.256	0.264	6.500	6.700	L4	0.024	0.039	0.600	1.000
D1	0.201	0.215	5.100	5.460	Φ	0.043	0.051	1.100	1.300
D2	0.190	REF	4.830	REF	θ	0°	8°	0°	8°
E	0.236	0.244	6.000	6.200	h	0.000	0.012	0.000	0.300
e	0.086	0.094	2.186	2.386	v	0.207	REF	5.250	REF