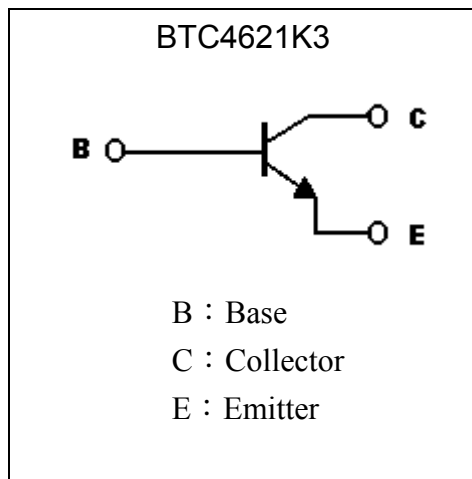


High Voltage NPN Epitaxial Planar Transistor

BTC4621K3

Features

- High breakdown voltage. ($BV_{CEO}=350V$)
- Low saturation voltage, typically $V_{CE(sat)}=0.1V$ at $I_C/I_B=10mA/1mA$.
- Pb-free package

Symbol

Absolute Maximum Ratings ($T_a=25^{\circ}C$)

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	350	V
Collector-Emitter Voltage	V_{CEO}	350	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current (DC)	I_C	100	mA
Collector Current (Pulse)	I_{CP}	200	
Base Current	I_B	50	mA
Power Dissipation ($T_A=25^{\circ}C$)	P_D	1	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55~+150	$^{\circ}C$



Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	350	-	-	V	I _C =50μA, I _E =0
BV _{CE0}	350	-	-	V	I _C =1mA, I _B =0
BV _{EB0}	6	-	-	V	I _E =50μA, I _C =0
I _{CB0}	-	-	0.1	μA	V _{CB} =300V, I _E =0
I _{EB0}	-	-	0.1	μA	V _{EB} =6V, I _C =0
*V _{CE(sat)}	-	0.1	0.6	V	I _C =20mA, I _B =2mA
*V _{BE(sat)}	-		1	V	I _C =20mA, I _B =2mA
h _{FE}	100	-	320	-	V _{CE} =10V, I _C =10mA
f _T	-	70	-	MHz	V _{CE} =30V, I _C =10mA, f=10MHz
Cob	-	2.6	-	pF	V _{CB} =30V, f=1MHz

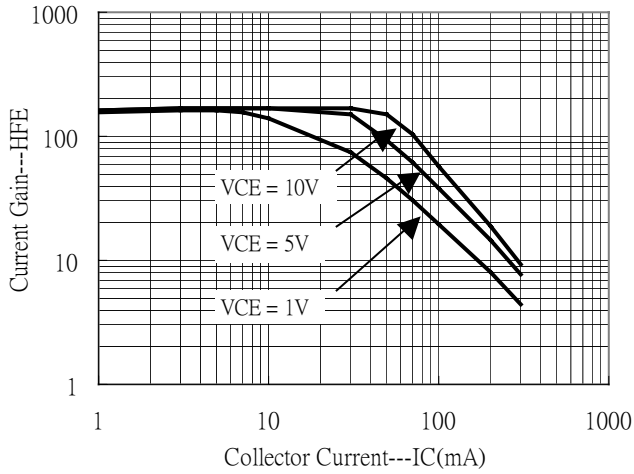
*Pulse Test : Pulse Width ≤380μs, Duty Cycle≤2%

Classification Of hFE

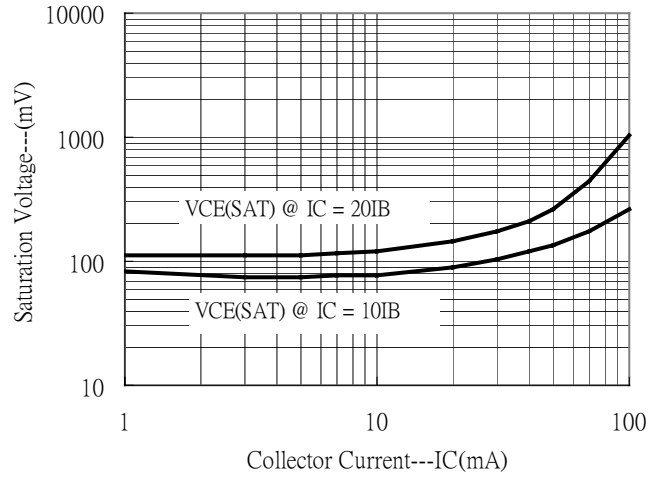
Rank	E	F
Range	100~200	160~320

Characteristic Curves

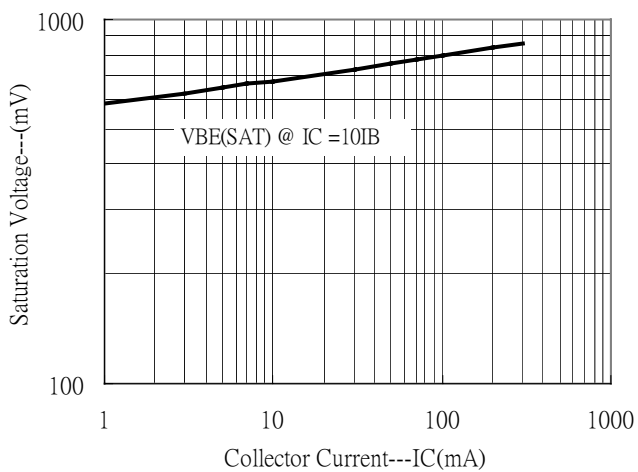
Current Gain vs Collector Current



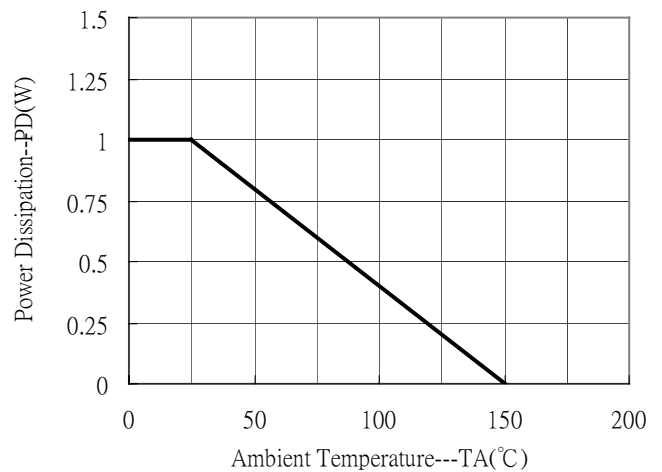
Saturation Voltage vs Collector Current



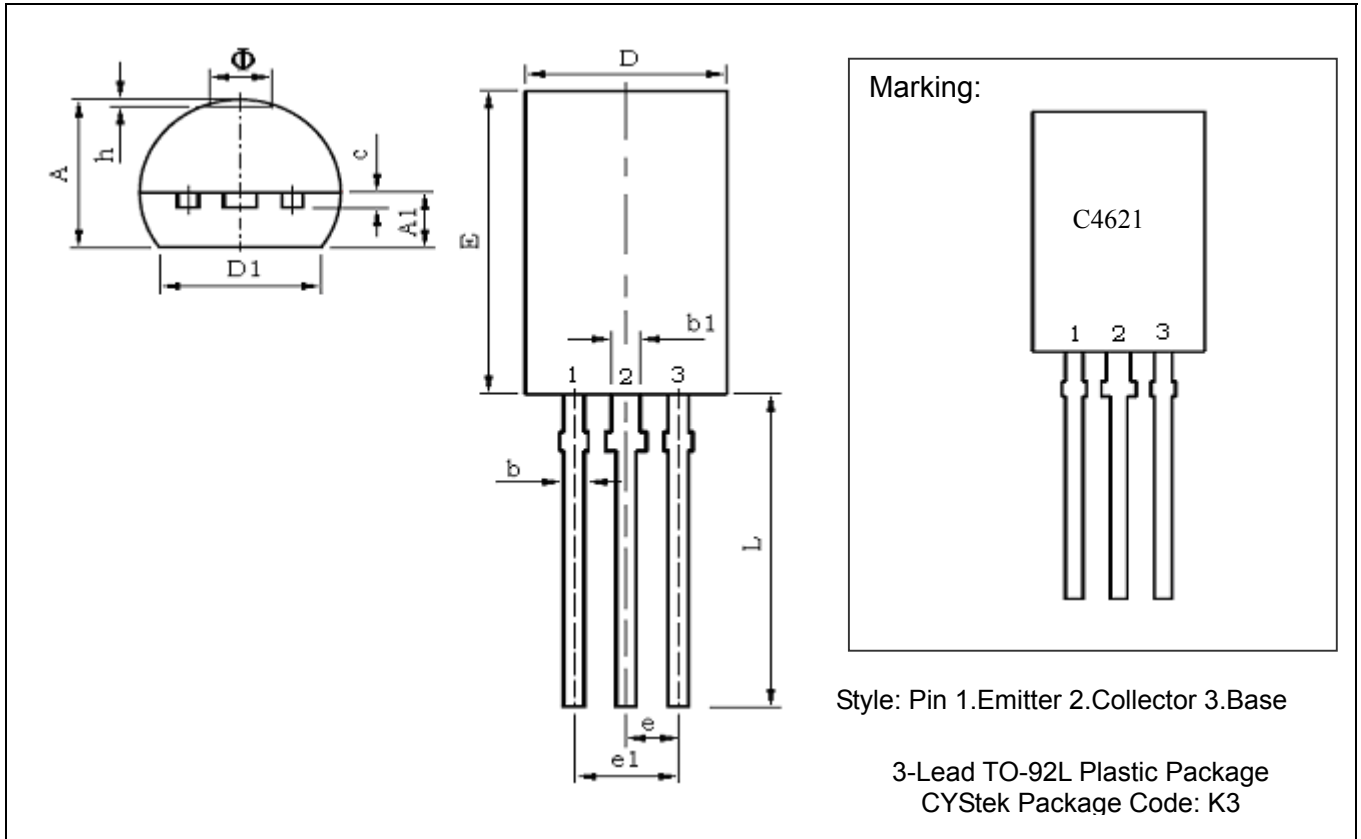
Saturation Voltage vs Collector Current



Power Derating Curve



TO-92L Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.146	0.161	3.700	4.100	E	0.307	0.323	7.800	8.200
A1	0.050	0.062	1.280	1.580	e	*0.050		*1.270	
b	0.014	0.022	0.350	0.550	e1	0.096	0.104	2.440	2.640
b1	0.024	0.031	0.600	0.800	L	0.543	0.559	13.800	14.200
c	0.014	0.018	0.350	0.450	Φ	-	0.063	-	1.600
D	0.185	0.201	4.700	5.100	h	0.000	0.012	0.000	0.300
D1	0.157	-	4.000	-					

Notes: 1. Controlling dimension: millimeters.
 2. Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 3. If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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