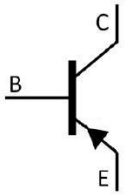
GENERAL PURPOSE TRANSISTOR

REPLACEMENT TYPE : BC557 PNP





MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

PIN1：Emitter PIN 2：Base PIN 3：Collector

极限参数 / Absolute Maximum Ratings(Ta=25℃)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA
Emitter Current - Continuous	I_E	100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

电性能参数 / Electrical Characteristics(Ta=25℃)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-0.015	μA
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-2.0mA	125		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-100mA I_B=-5.0mA			-0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-100mA I_B=-5.0mA		-0.9	-1.1	V
Base-Emitter Voltage	$V_{BE(1)}$	V_{CE}=-5.0V I_C=-2.0mA	-0.6		-0.75	V
	$V_{BE(2)}$	V_{CE}=-5.0V I_C=-10mA			-0.8	V
Current Gain Bandwidth Product	f_T	V_{CE}=-5.0V I_C=-10mA f=100MHz		150		MHz
Transition Frequency	C_{ob}	V_{CB}=-10V f=1.0MHz		4.5		pF
Noise Figure	NF	V_{CE}=-6.0V I_C=-0.1mA R_g=10KΩ f=1.0KHz		1.0	10	dB

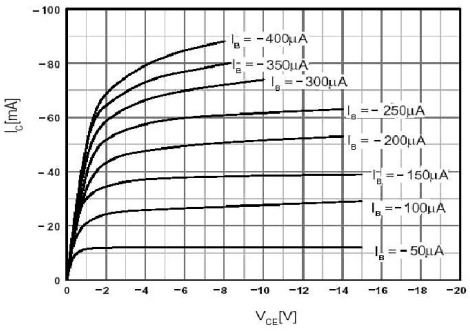
CLASSIFICATION OF h_{FE}

Rank	A	B	C
Range	120-220	180-460	420-800

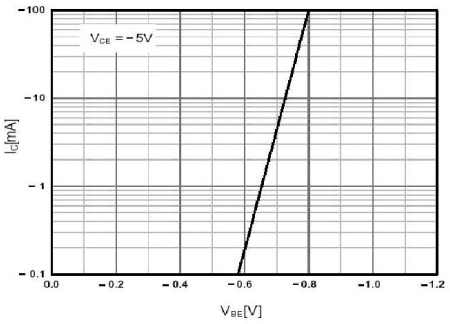
GENERAL PURPOSE TRANSISTOR

电参数曲线图 / Electrical Characteristic Curve

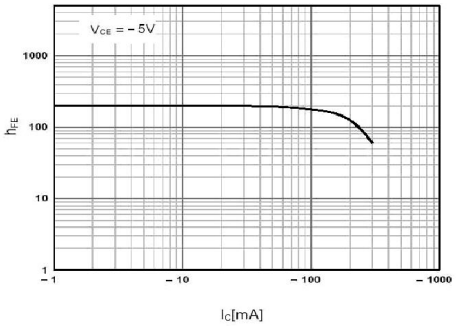
Ic – VCE



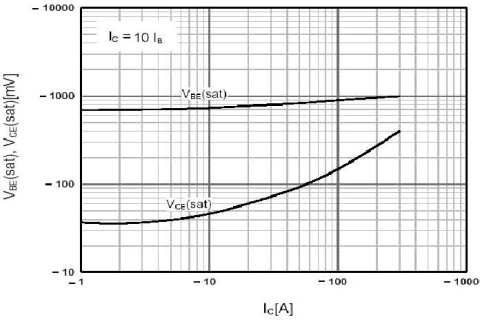
Ic – VBE



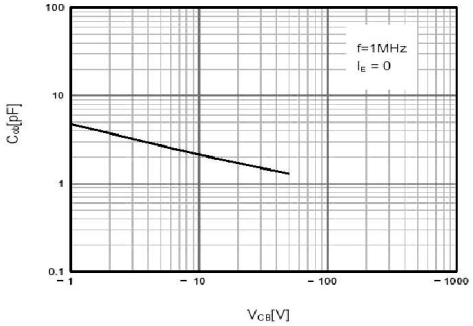
hFE – Ic



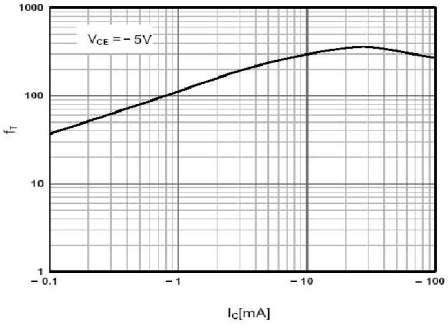
VCE(sat), VBE(sat) – Ic



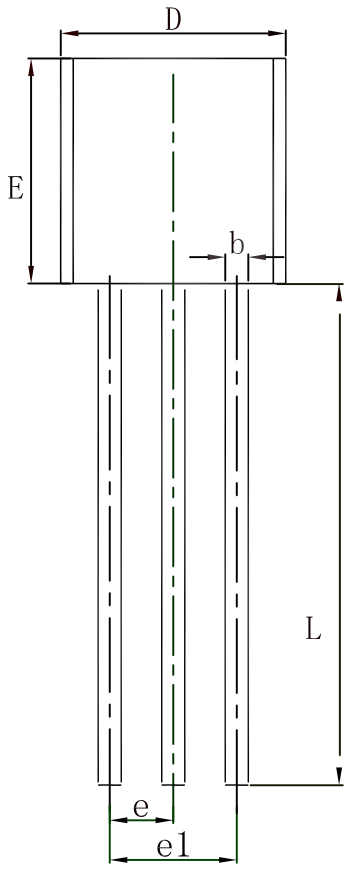
Cob – VCB

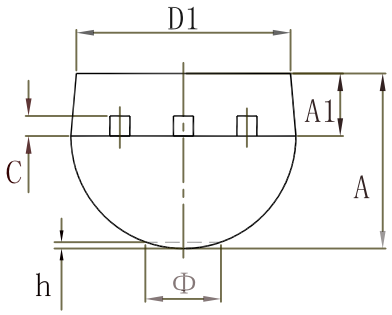


fT – Ic



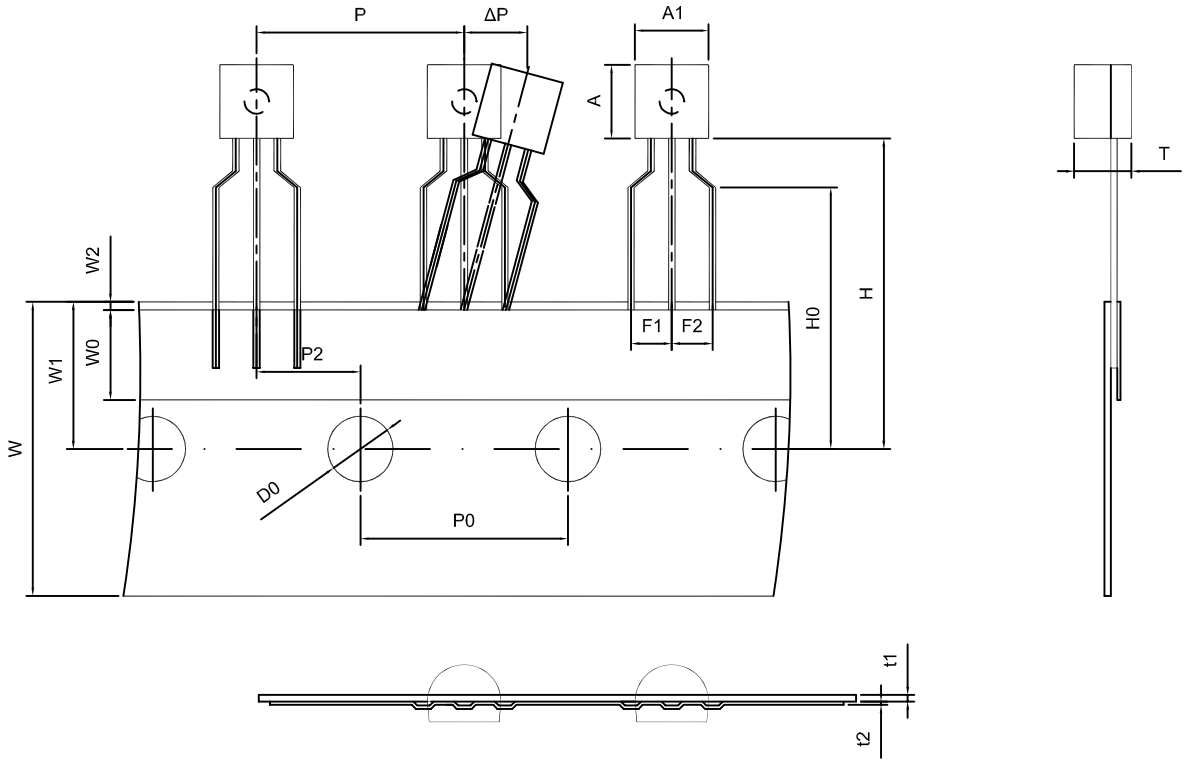
TO-92 Package Outline Dimensions





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP.		0.050 TYP.	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92 Package Tapeing Dimension



Dimiensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5±0.2	4.5±0.2	3.5±0.2	12.7±0.3	12.7±0.2	6.35±0.3	2.5±0.3	2.5±0.3	18.0+1.0/-0.5
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0±0.5	9.0±0.5	1.0 MAX.	19.0±1.0	16.0±0.5	4.0±0.5	0.4±0.05	0.2±0.05	0 ± 1.0

