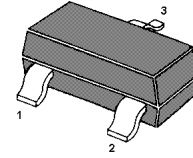


## PNP Silicon Epitaxial Planar Transistor

For medium power amplifier applications

The transistor is subdivided into two groups, O and Y according to its DC current gain.



1.Base 2.Emitter 3.Collector  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	40	V
Collector Emitter Voltage	$-V_{CEO}$	32	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_{amb} = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$	O $h_{FE}$	70	-	140	-
	Y $h_{FE}$	120	-	240	-
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	32	-	-	V
Emitter Base Breakdown Voltage at $-I_E = 10\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at $-V_{CB} = 40\text{ V}$	$-I_{CBO}$	-	-	0.1	$\mu\text{A}$
Emitter Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	-	0.1	$\mu\text{A}$
Collector Saturation Voltage at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$	$-V_{CE(sat)}$	-	-	0.25	V
Transition Frequency at $-V_{CE} = 6\text{ V}$ , $-I_C = 20\text{ mA}$	$f_T$	-	200	-	MHz
Collector Output Capacitance at $-V_{CB} = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	7.5	-	pF



Fig. 1  $P_C - T_a$

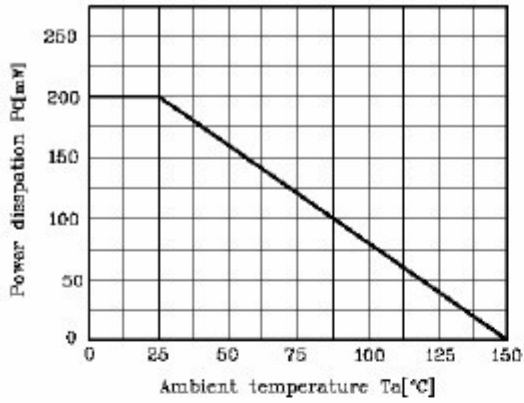


Fig. 2  $I_C - V_{BE}$

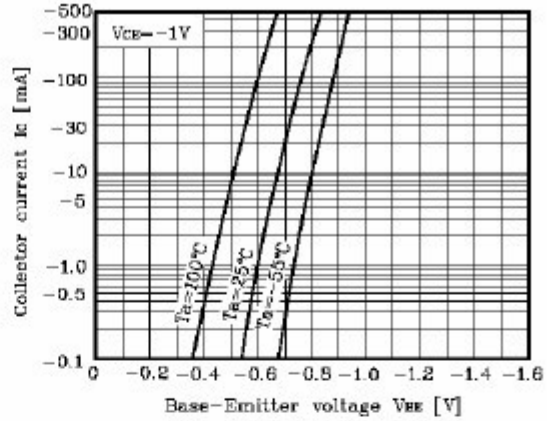


Fig. 3  $I_C - V_{CE}$

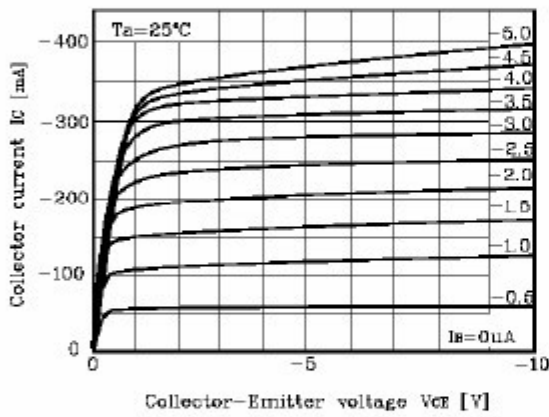


Fig. 4  $V_{CE(sat)} - I_C$

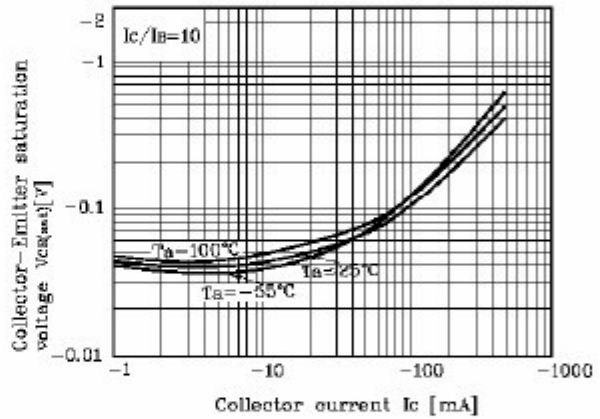


Fig. 5  $h_{FE} - I_C$

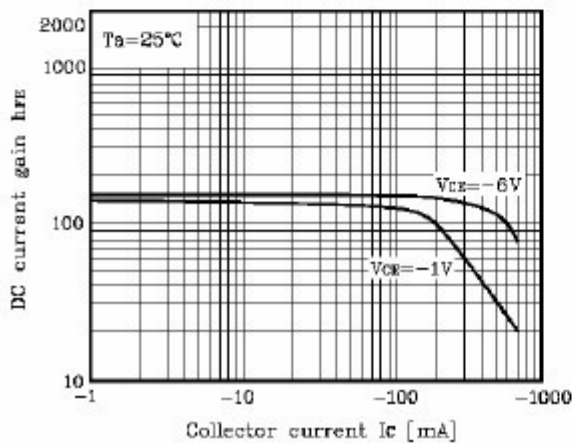


Fig. 6  $h_{FE} - I_C$

