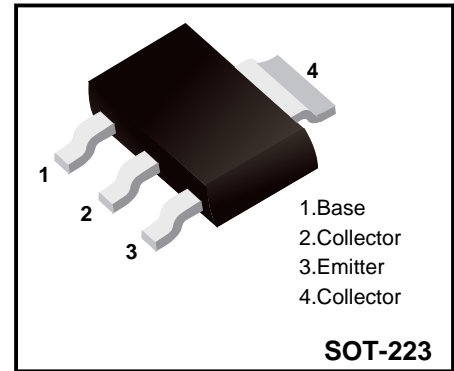


**PNP Plastic-Encapsulate Transistors**

**Features**

- 2 Amps continuous current
- Fast switching
- Guaranteed  $h_{FE}$  specified up to 2A
- Hight voltage
- Complement to FZT605



**Absolute Maximum Rating (T<sub>c</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$BV_{CBO}$	-140	V
Collector-Emitter Voltage	$BV_{CEO}$	-120	V
Emitter-Base Voltage	$BV_{EBO}$	-10	V
Continuous Collector Current	$I_C$	-2	A
Peak Pulse Current	$I_{CM}$	-4	A
Power Dissipation at T <sub>c</sub> =25°C	$P_{TOT}$	2	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~150	°C

**Electrical Characteristics (T<sub>c</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$BV_{CBO}$	$I_C = -100\mu A, I_E = 0$	-140			V
Collector-emitter breakdown voltage	$BV_{CEO}$	$I_C = -10mA, I_B = 0$	-120			V
Emitter-base breakdown voltage	$BV_{EBO}$	$I_E = -100\mu A, I_C = 0$	-10			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -120V, I_B = 0$			-0.1	$\mu A$
	$I_{CES}$	$V_{CES} = -80V$			-10	
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -8V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -5V, I_C = -10mA$	3000		30000	
		$V_{CE} = -5V, I_C = -100mA$	3000			
		$V_{CE} = -5V, I_C = -1A$	3000			
		$V_{CE} = -5V, I_C = -2A$	2000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -1mA$ $I_C = -2A, I_B = -2mA$			-1.3 -2.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1A, I_B = -10mA$			-1.8	V
Base-emitter turn-on voltage	$V_{BE(on)}$	$V_{CE} = -5V, I_C = -1A$			-1.7	V
Transition Frequency	$f_T$	$V_{CE} = -10V, I_C = -100mA$		160		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		15		pF

Typical Characteristics

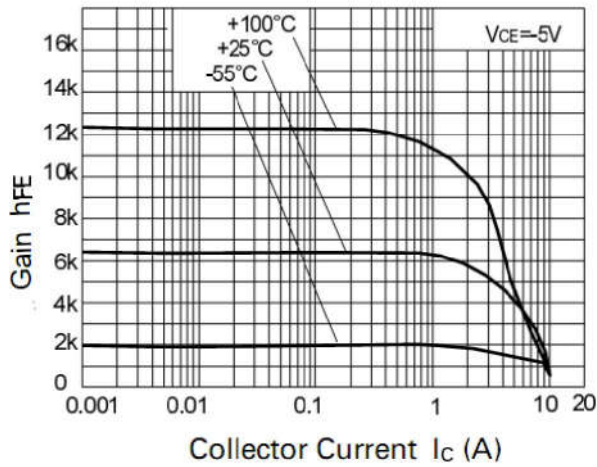


Figure 1. DC current Gain

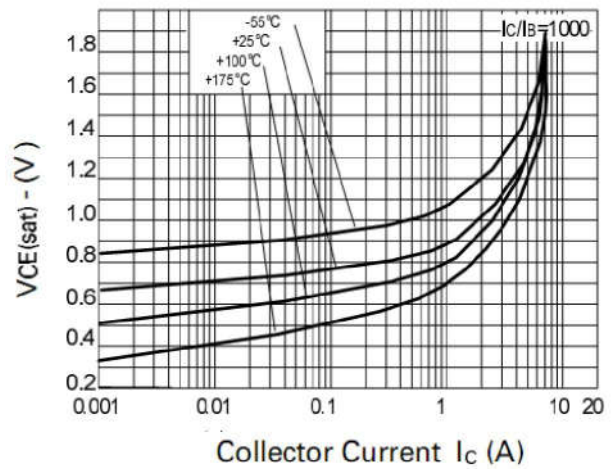


Figure 2. Collector-Emitter Saturation Voltage

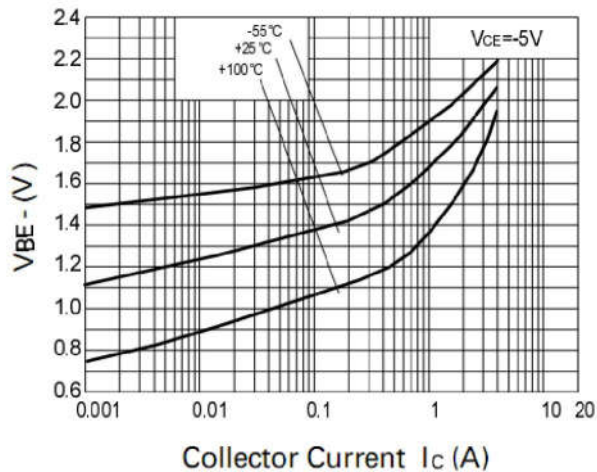


Figure 3. Base-Emitter on Voltage

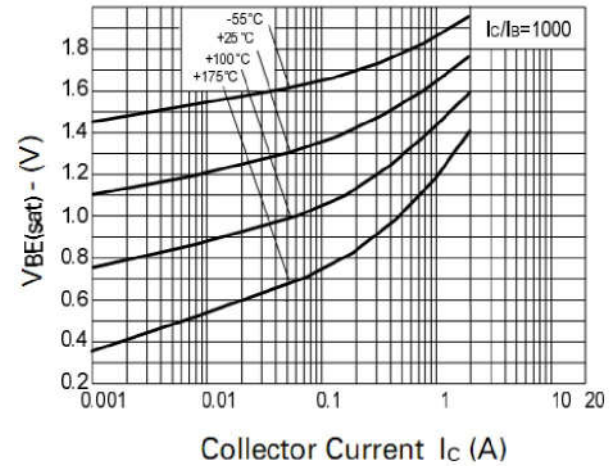


Figure 4. Base-Emitter Saturation Voltage

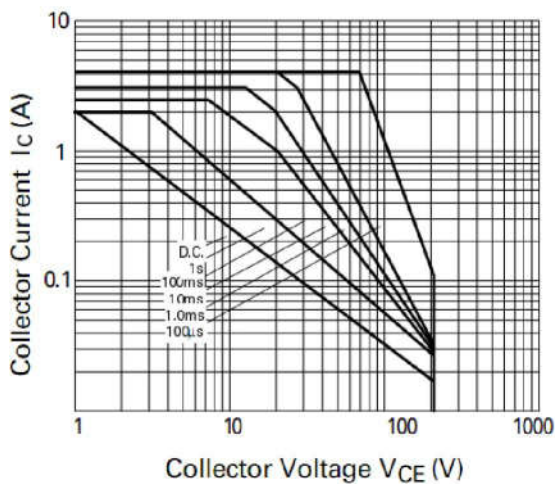


Figure 5. Safe Operating Area

**Ordering information**

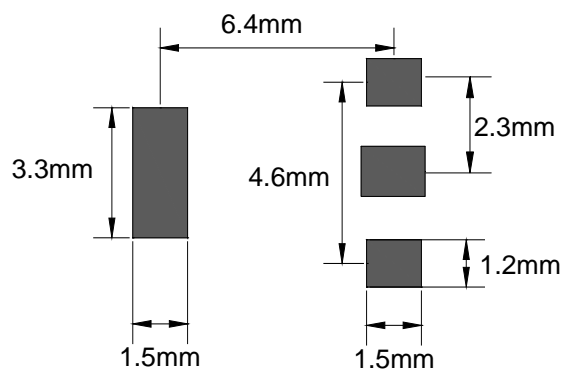
Package	Packing Description	Base Quantity	Packing Quantity
SOT-223	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton
	Tape/Reel, 13" reel	2500pcs/Reel	5000PCS/Box 30000PCS/Carton

**Package Dimensions**

**SOT-223**

Dlm	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.50	1.80	0.059	0.071
A1	0.00	0.10	0.000	0.004
A2	1.50	1.70	0.059	0.067
b	0.65	0.75	0.026	0.030
c	0.20	0.30	0.008	0.012
D	6.40	6.60	0.252	0.260
D1	2.90	3.10	0.114	0.122
E	3.30	3.70	0.130	0.146
E1	6.85	7.15	0.270	0.281
e	2.20	2.40	0.087	0.094
e1	4.40	4.80	0.173	0.189
L	1.65	1.85	0.065	0.073
L1	0.90	1.15	0.035	0.045

**The recommended mounting pad size**



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