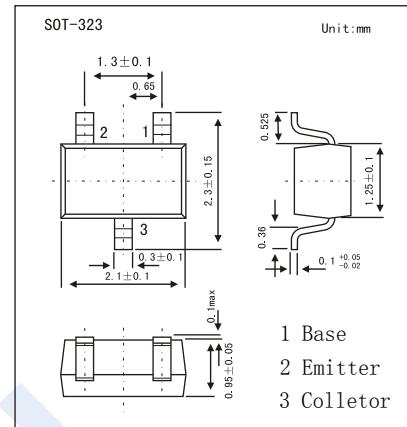


PNP Transistors**2SA1813****■ Features**

- High DC current gain ($hFE=500$ to 1200).
- Low collector-to-emitter saturation voltage
- High V_{EB0}

**■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$**

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-30	V
Collector - Emitter Voltage	V_{CEO}	-25	
Emitter - Base Voltage	V_{EBO}	-15	
Collector Current - Continuous	I_C	-150	mA
Collector Current - Pulse	I_{CM}	-300	
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -100 \mu\text{A}, I_E = 0$	-30			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1 \text{ mA}, R_{BE} = \infty$	-25			
Emitter-base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}, I_C = 0$	-15			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -10 \text{ V}, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = -50 \text{ mA}, I_B = -1 \text{ mA}$	-0.15	-0.3		V
Base-emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = -50 \text{ mA}, I_B = -1 \text{ mA}$	-0.78	-1.1		
DC current gain	h_{FE}	$V_{CE} = -5 \text{ V}, I_C = -1 \text{ mA}$	500	800	1200	
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2.6		pF
Transition frequency	f_T	$V_{CE} = -10 \text{ V}, I_C = -10 \text{ mA}$		210		MHz

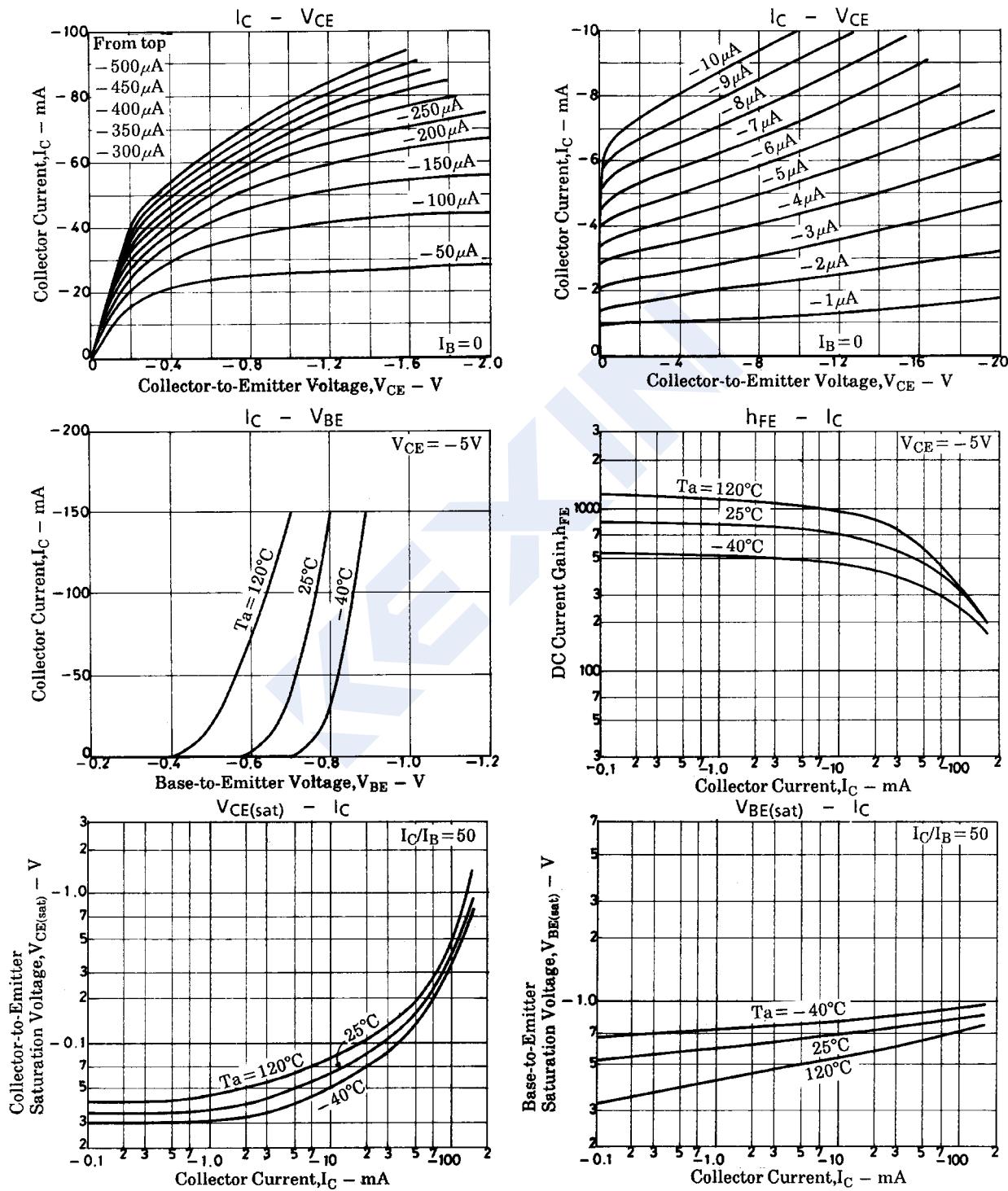
■ Marking

Marking	KS
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PNP Transistors

2SA1813

■ Typical Characteristics



PNP Transistors**2SA1813**

■ Typical Characteristics

