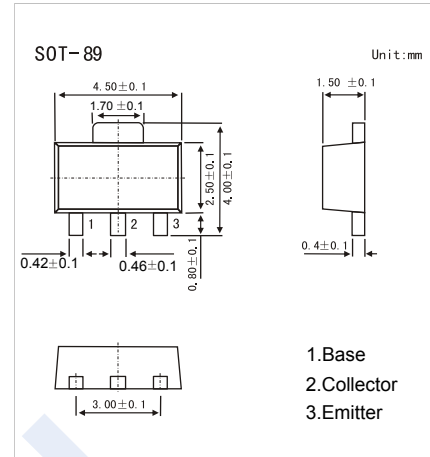


PNP Transistors

2SA1944

■ Features

- High voltage
- Low collector-to-emitter saturation voltage.
- High h_{FE} $h_{FE}=400$ to 800
- Small package for mounting
- Complements to 2SC5209

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-50	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-6	
Collector Current - Continuous	I_C	-1	A
Collector Current - Pulse	I_{CM}	-2	
Collector Power Dissipation	P_C	0.5	W
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_{CB0}	$I_C = -100\ \mu\text{A}$, $I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1\ \text{mA}$, $R_{BE} = \infty$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100\ \mu\text{A}$, $I_C = 0$	-6			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -40\ \text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5\ \text{V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\ \text{mA}$, $I_B = -10\ \text{mA}$		-0.2	-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\ \text{mA}$, $I_B = -10\ \text{mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -6\ \text{V}$, $I_C = -100\ \text{mA}$	400		800	
Collector output capacitance	C_{ob}	$V_{CB} = -10\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		30		pF
Transition frequency	f_T	$V_{CE} = -10\ \text{V}$, $I_E = 10\ \text{mA}$		90		MHz

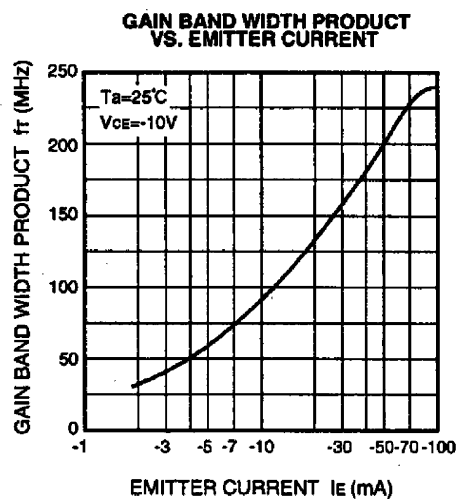
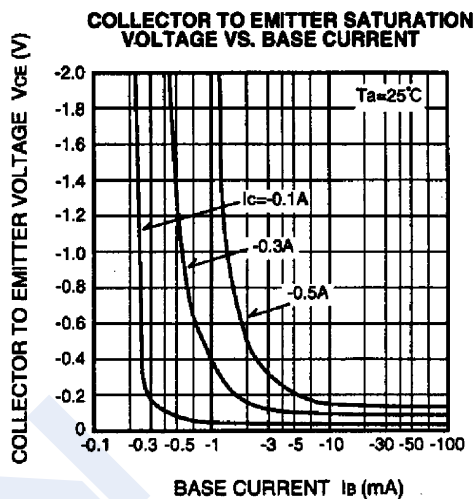
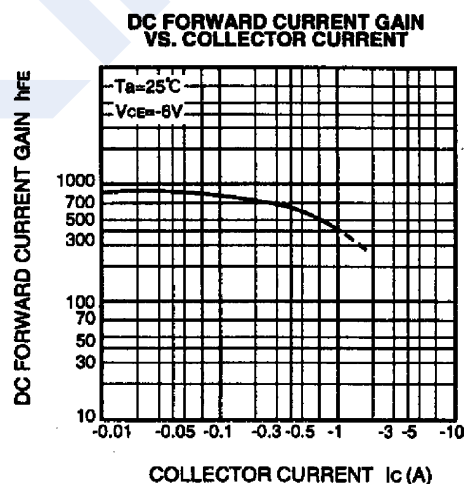
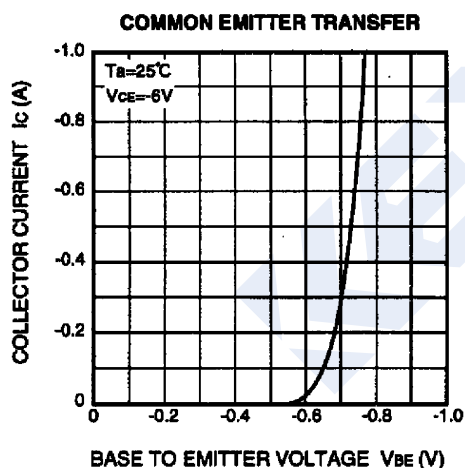
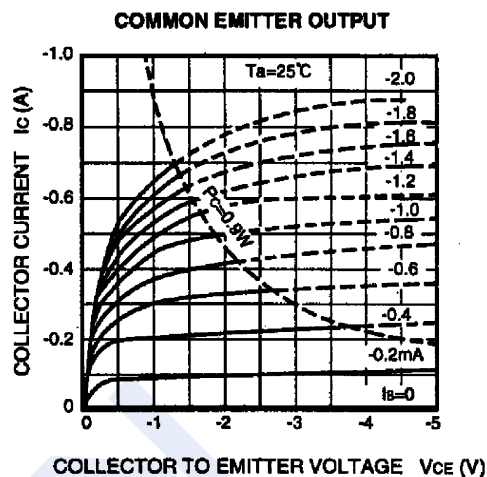
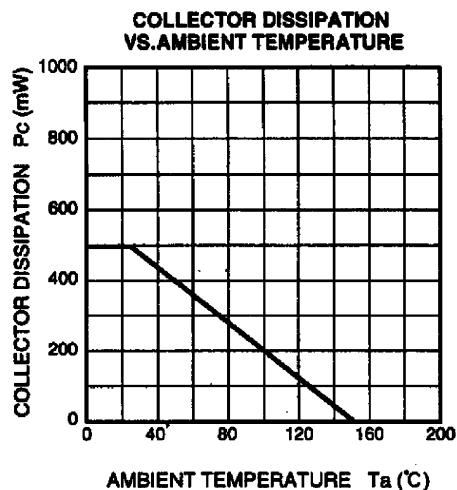
■ Classification of h_{FE}

Range	400-800
Marking	XG

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2SA1944

■ Typical Characteristics



PNP Transistors

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■ Typical Characteristics

