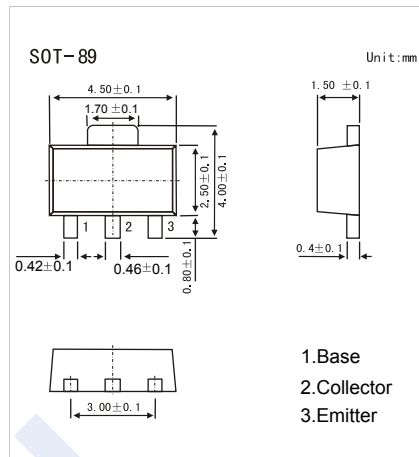


PNP Transistors

2SA1736-HF

■ Features

- Low saturation voltage
- High speed switching time
- Small flat package
- $P_C = 1.0$ to 2.0 W (mounted on a ceramic substrate)
- Complementary to 2SC4541-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-60	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-6	
Collector Current - Continuous	I_C	-3	A
Base Current	I_B	-0.6	
Collector Power Dissipation (Note.1)	P_C	0.5	W
		1	
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

Note.1: Mounted on ceramic board (250mm² X 0.8mm)

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -1$ mA, $I_E = 0$	-60			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -10$ mA, $I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -1$ mA, $I_C = 0$	-6			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -60$ V, $I_E = 0$			-0.1	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6$ V, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1.5$ A, $I_B = -75$ mA			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1.5$ A, $I_B = -75$ mA			-1.2	
DC current gain	$h_{FE(1)}$	$V_{CE} = -2$ V, $I_C = -100$ mA	120		400	
	$h_{FE(2)}$	$V_{CE} = -2$ V, $I_C = -2$ A	40			
Turn-on Time	t_{on}	See specified Test Circuit		0.1		us
Storage time	t_{stg}			0.2		
Fall time	t_f			0.1		
Collector output capacitance	C_{ob}	$V_{CB} = -10$ V, $I_E = 0$, $f = 1$ MHz		32		pF
Transition frequency	f_T	$V_{CE} = -2$ V, $I_C = -100$ mA		100		MHz

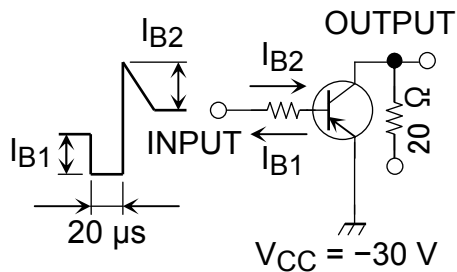
■ Marking

Marking	L*D _F
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PNP Transistors

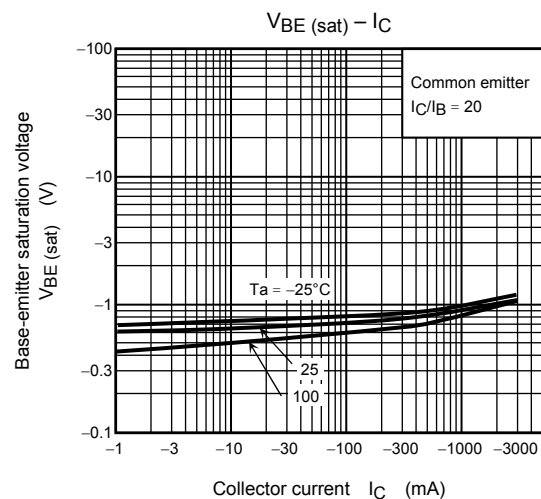
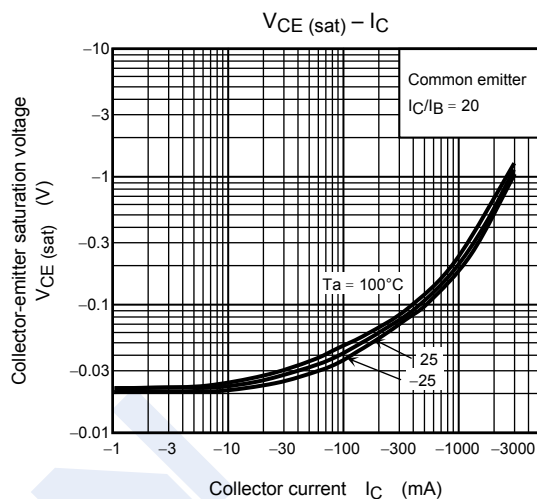
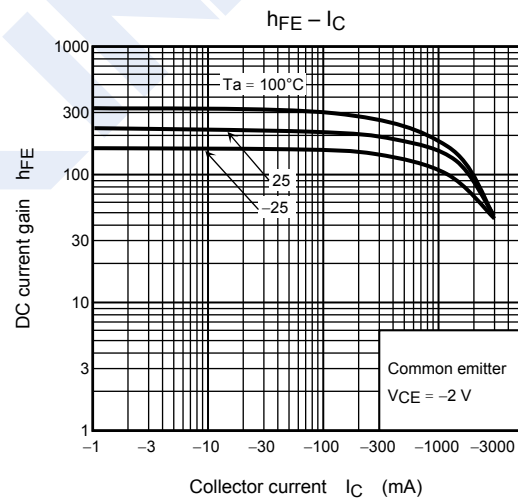
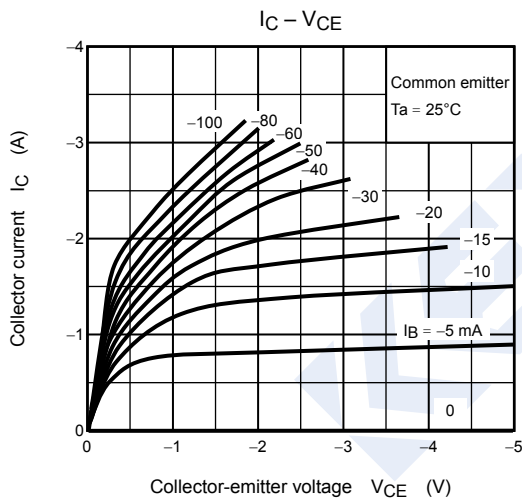
2SA1736-HF

Switching Time Test Circuit



$I_{B1} = 75 \text{ mA}, I_{B2} = 75 \text{ mA},$
DUTY CYCLE $\leq 1\%$

■ Typical Characteristics



PNP Transistors

2SA1736-HF

■ Typical Characteristics

