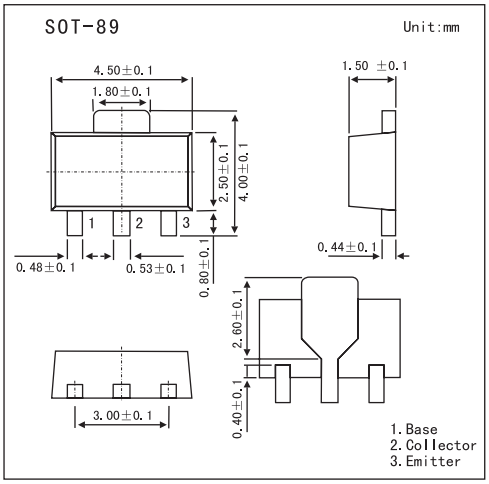
PNP Epitaxial Planar Silicon

2SA1730

■ Features

- Adoption of FBET , MBIT processes.
- Large current capacity.
- Low collector-to-emitter saturation voltage.
- Fast switching speed.
- Small-sized package.



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-40	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-3	A
Collector current (pulse)	I_{CP}	-6	A
Collector dissipation *	P_C	1.5	W
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* Mounted on ceramic board (250mm^2 X 0.8mm).

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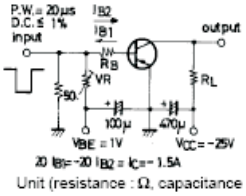
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -40V , I_E = 0			-1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = -3V , I_C = 0			-1	μA
DC current Gain	h_{FE}	V_{CE} = -2V , I_C = -500mA	70		280	
Gain bandwidth product	f_T	V_{CE} = -2V , I_C = -500mA		300		MHz
Common base output capacitance	Cob	V_{CB} = -10V , f = 1MHz		35		pF
Collector-to-emitter saturation voltage	$V_{CE(sat)}$	I_C = -1.5A , I_B =-75mA		-0.3	-0.8	V
Base-to-emitter saturation voltage	$V_{BE(sat)}$	I_C = -1.5A , I_B =-75mA		-0.95	-1.3	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	I_C = -10μA , I_E = 0	-50			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -1mA , R_{BE} = ∞	-40			V
Emitter-to-base breakdown voltage	$V_{(BR)EBO}$	I_E = -10μA , I_C = 0	-5			V
Turn-on time	t_{on}	 Unit (resistance : Ω, capacitance : F)		50	100	ns
Storage time	t_{stg}			120	220	ns
Turn-off time	t_{off}			150	300	ns

■ h_{FE} Classification

Marking	AH		
Rank	Q	R	S
hFE	70～140	100～200	140～280