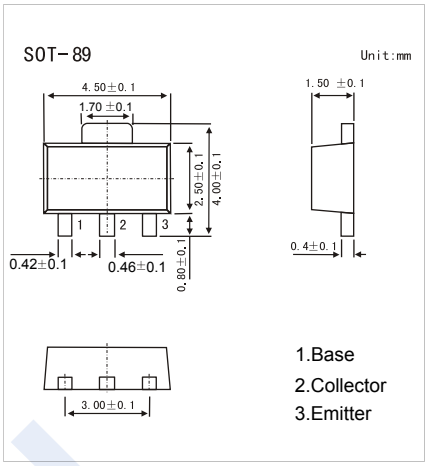
PNP Transistors

2SA1730



■ Features

- 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	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-3	A
Collector Current -Pulse	I_{Cp}	-6	
Collector Power Dissipation (Note.1)	P_C	1.5	W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

Note.1: Mounted on ceramic board (250mm^2 X 0.8mm)

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 uA, I_E=0	-50			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, R_{BE}= ∞	-40			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 uA, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -40 V , I_E=0			-1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -3V , I_C=0			-1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1.5 A, I_B=-75 mA		-0.3	-0.8	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-1.5 A, I_B=-75 mA		-0.95	-1.3	
DC current gain	$h_{FE(1)}$	V_{CE}= -2V, I_C= -500 mA	70		280	
	$h_{FE(2)}$	V_{CE}= -2V, I_C= -3 A	25			
Turn-on Time	t_{on}	See specified Test Circuit		50	100	ns
Storage time	t_{stg}			120	220	
Tutn-off time	t_{off}			150	300	
Collector output capacitance	C_{ob}	V_{CB}= -10V, f=1MHz		35		pF
Transition frequency	f_T	V_{CE}= -2V, I_C= -500 mA		300		MHz

■ Classification of $h_{fe(1)}$

Type	2SA1730-Q	2SA1730-R	2SA1730-S
Range	70-140	100-200	140-280
Marking	AHQ	AHR	AHS

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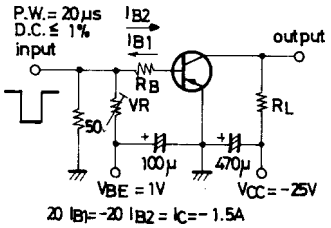
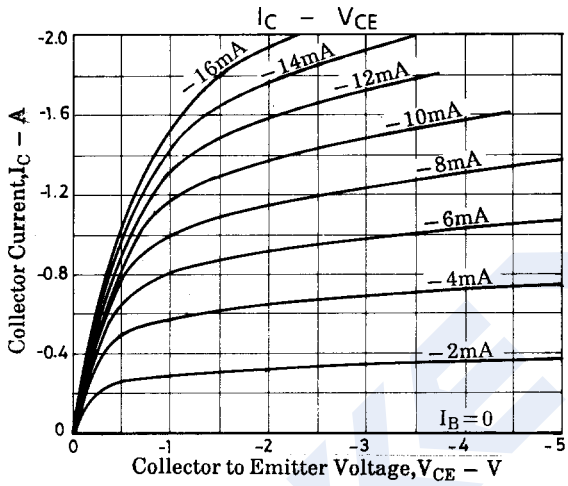
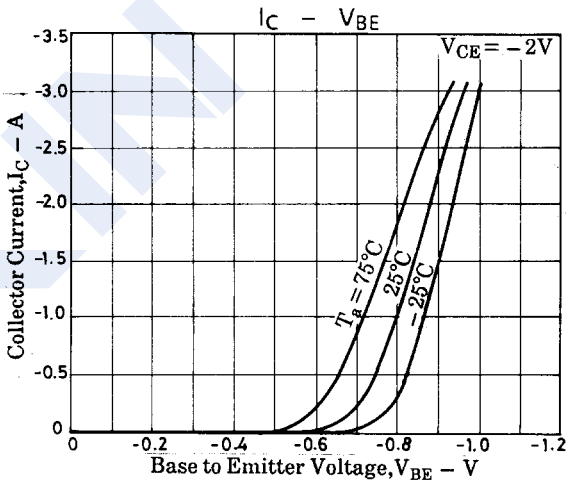
Swicthing Time Test Circuit

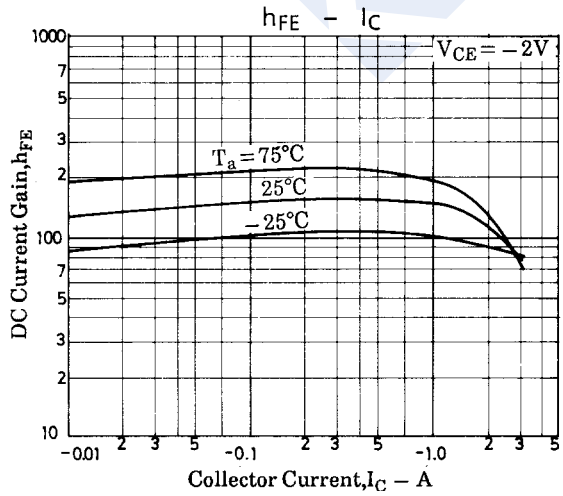


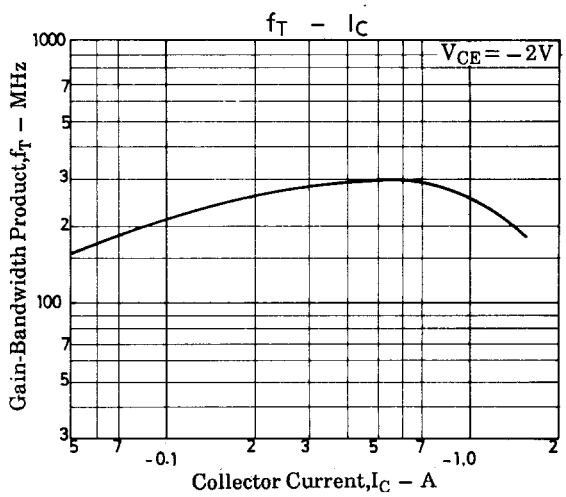
Unit (resistance : Ω, capacitance : F)

■ Typical Characterisitics









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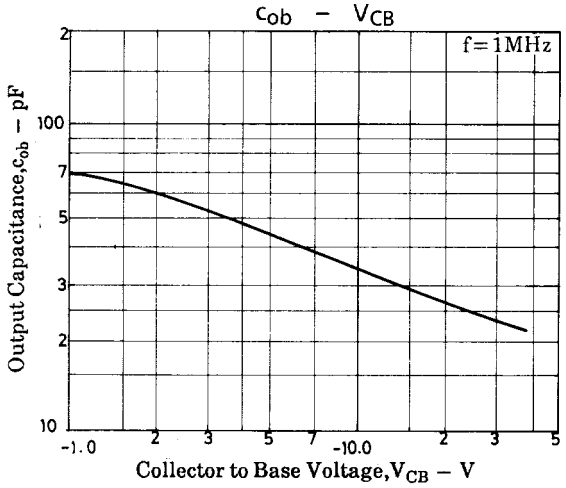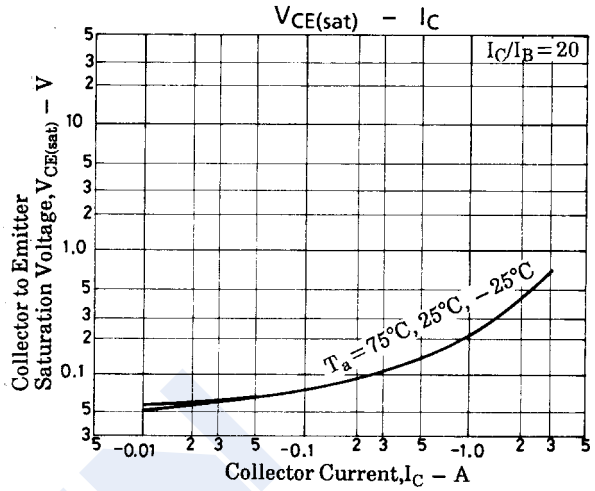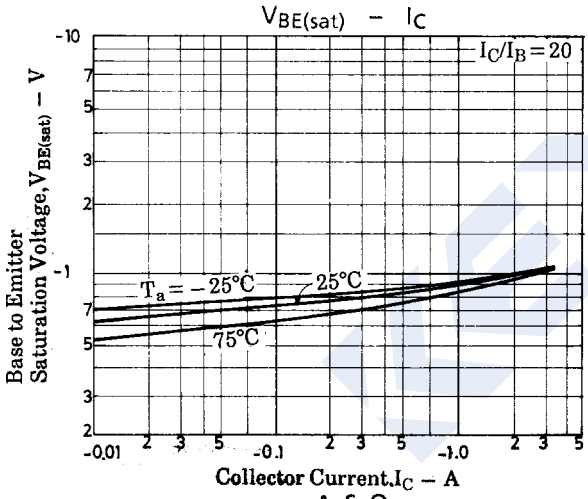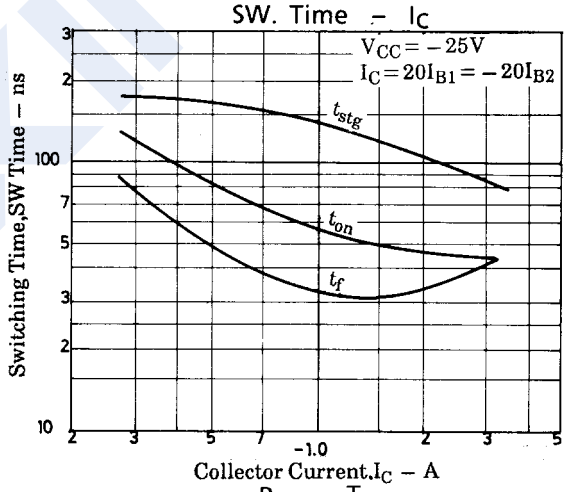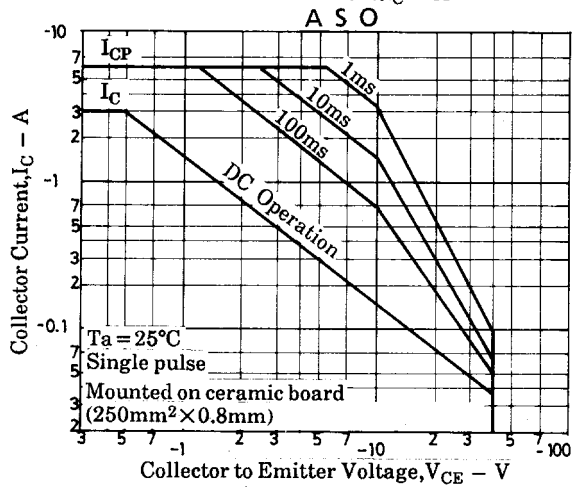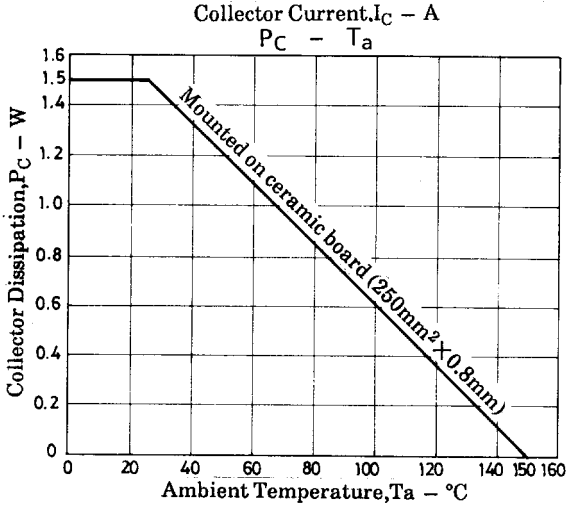
■ Typical Characterisitics