

2SA564, 2SA564A

Silicon PNP Epitaxial Planar Type

For general amplification

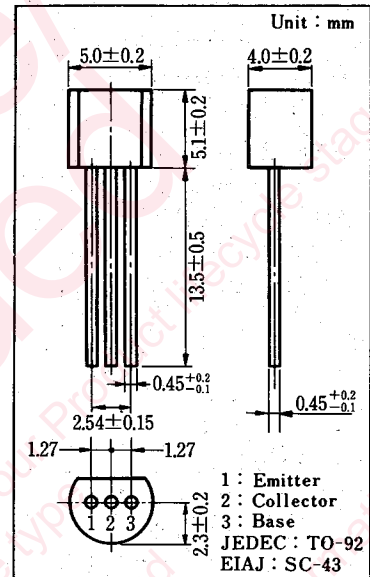
■ Features

- Large DC current gain h_{FE}

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

Item	Symbol	Value	Unit
Collector-Base Voltage	2SA564	-25	V
	2SA564A	-45	
Collector-Emitter Voltage	2SA564	-25	V
	2SA564A	-45	
Emitter-Base Voltage	V_{EBO}	-7	V
Peak Collector Voltage	I_{CP}	-200	mA
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

■ Package Dimensions

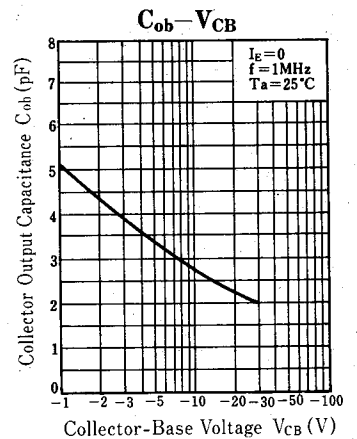
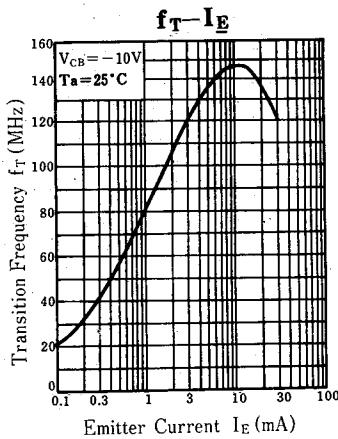
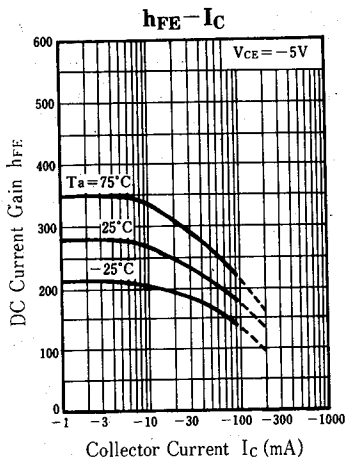
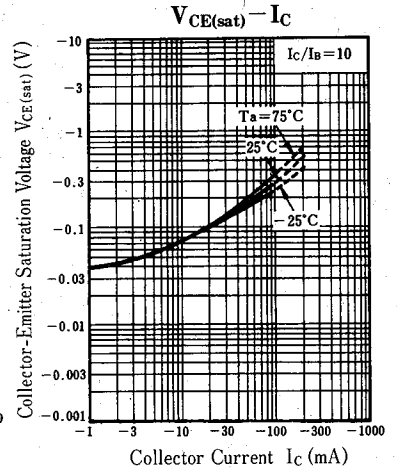
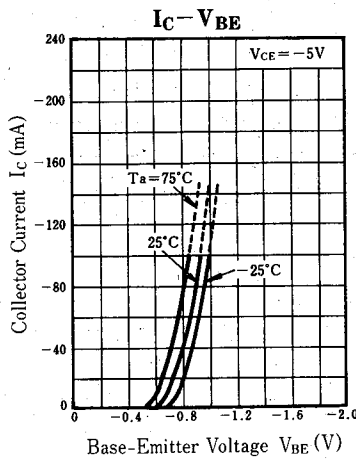
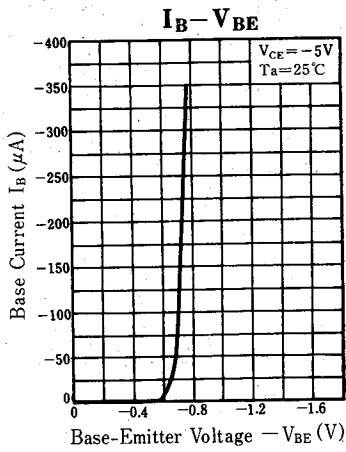
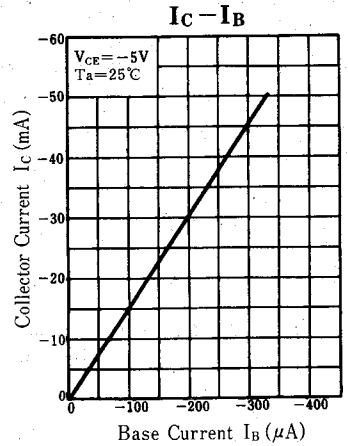
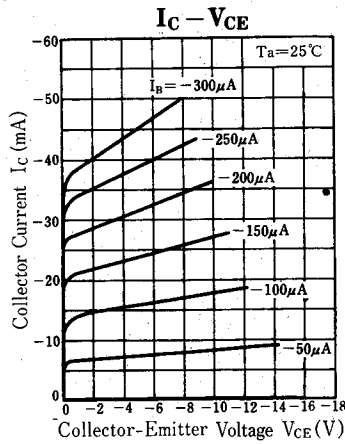
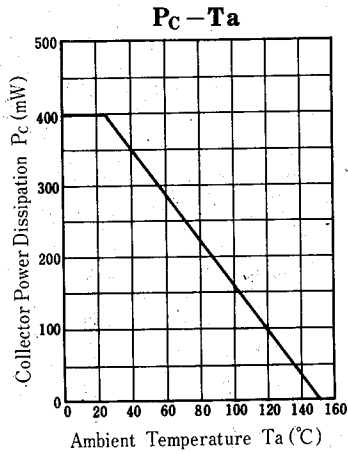


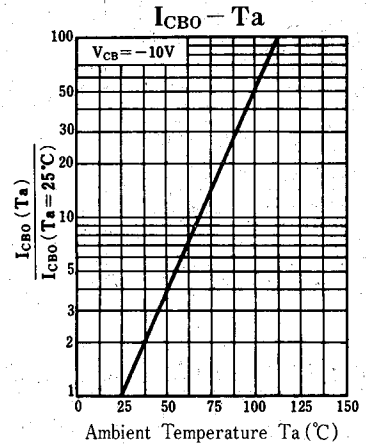
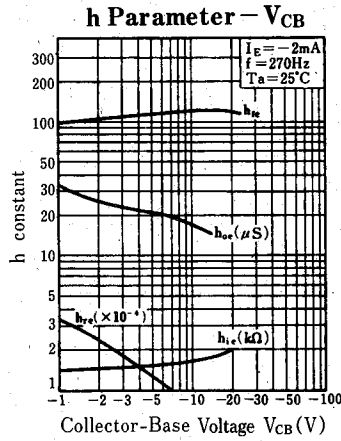
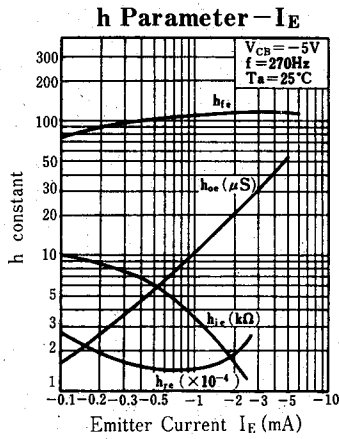
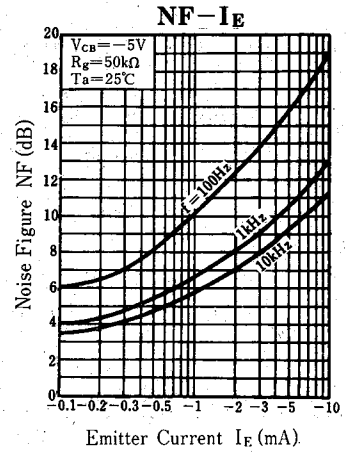
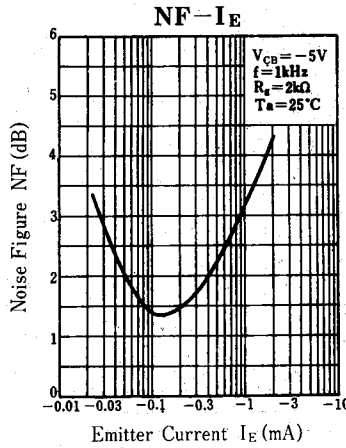
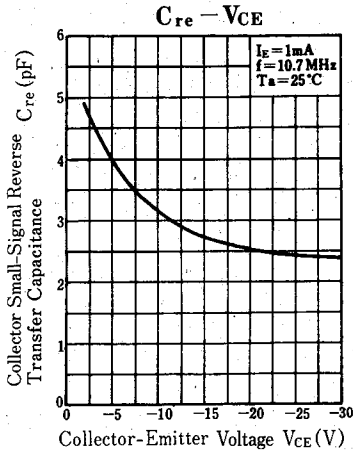
■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -20\text{ V}, I_E = 0$			-1	μA
	I_{CEO}	$V_{CE} = -20\text{ V}, I_B = 0$			-10	
Collector-Base Voltage	V_{CBO}	$I_C = -10\mu\text{A}, I_E = 0$	-25			V
			-45			
Collector-Emitter Voltage	V_{CEO}	$I_C = -2\text{ mA}, I_B = 0$	-25			V
			-45			
Emitter-Base Voltage	V_{EBO}	$I_E = -10\mu\text{A}, I_C = 0$	-7			V
DC Current Gain	h_{FE}^*	$V_{CE} = -5\text{ V}, I_C = -2\text{ mA}$	130		520	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -50\text{ mA}, I_B = -2.5\text{ mA}$			-1	V
Transition Frequency	f_T	$V_{CB} = -10\text{ V}, I_E = 2\text{ mA}, f = 200\text{ MHz}$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$		3.5		pF

* h_{FE} Ranking

Rank	Q	R	S
h_{FE}	130 ~ 260	180 ~ 360	260 ~ 520





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