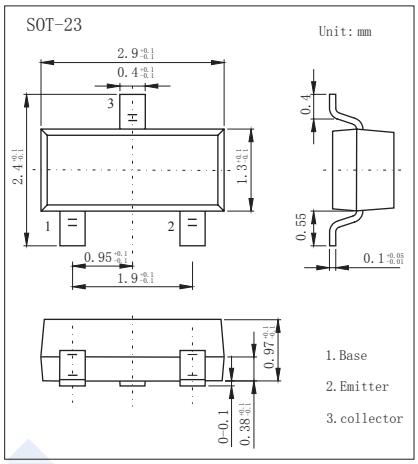
PNP Transistors

2SA1226



■ Features

- Collector Current Capability I_C=-30mA
- Collector Emitter Voltage V_{CEO}=-40V

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-40	V
Collector - Emitter Voltage	V_{CEO}	-40	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-30	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-40			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-40			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -40 V , I_E=0			-0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V , I_C=0			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-10 mA, I_B=-1mA			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-10 mA, I_B=-1mA			-1.2	
Base - emitter voltage	V_{BE}	V_{CE}= -10V, I_C= -10mA	-0.67			
DC current gain	h_{FE}	V_{CE}= -10V, I_C= -1mA	40		180	
Noise Figure	NF	V_{CE} = –10V, I_C = –1mA, R_g = 100kΩ, f=1MHz		3.5		dB
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E=0,f=1MHz			2	pF
Transition frequency	f_T	V_{CE}= -10V, I_E= 1mA	250			MHz

■ Classification of h_{fe}

Type	2SA1226-E2	2SA1226-E3	2SA1226-E4
Range	40-80	60-120	90-180
Marking	E2	E3	E4

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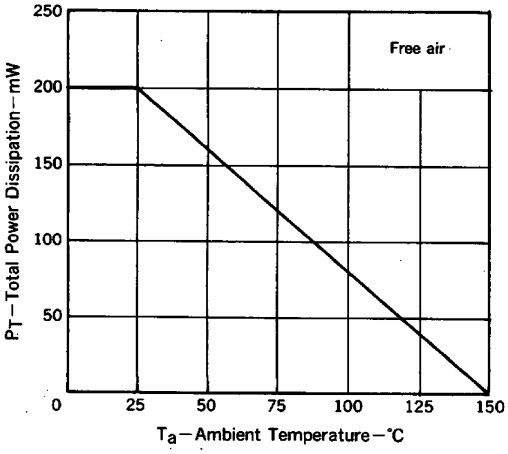
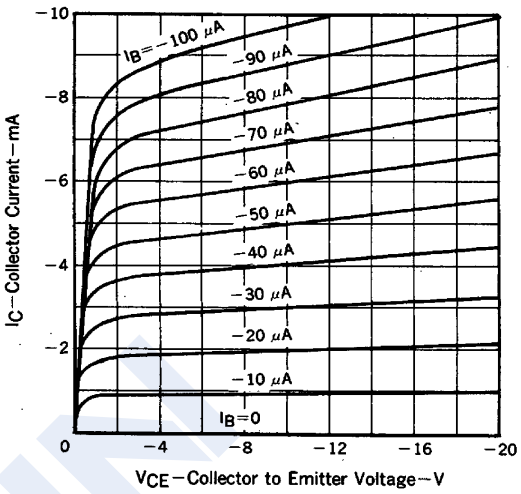
■ Typical Characterisitics

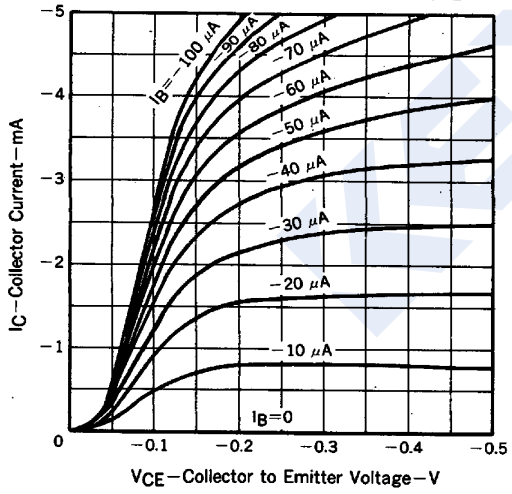
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



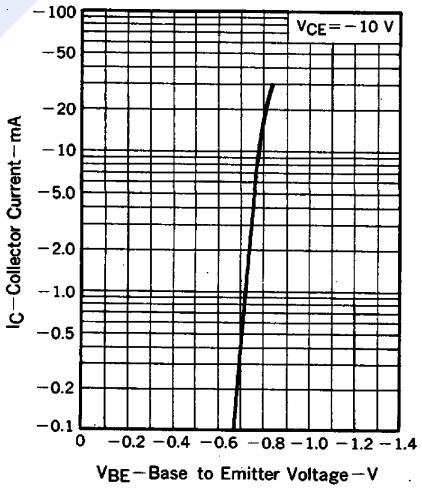
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



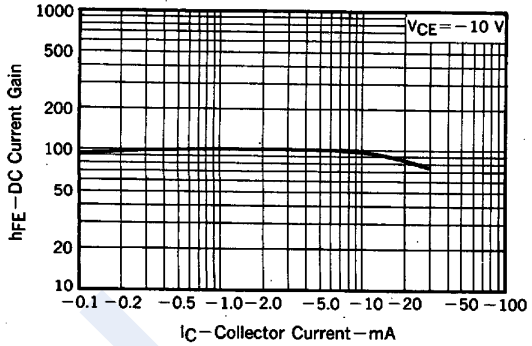
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



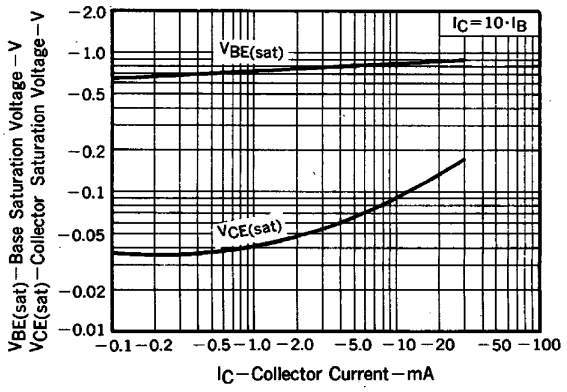
COLLECTOR CURRENT vs. BASE TO EMITTER VOLTAGE



DC CURRENT GAIN vs. COLLECTOR CURRENT



BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



PNP Transistors

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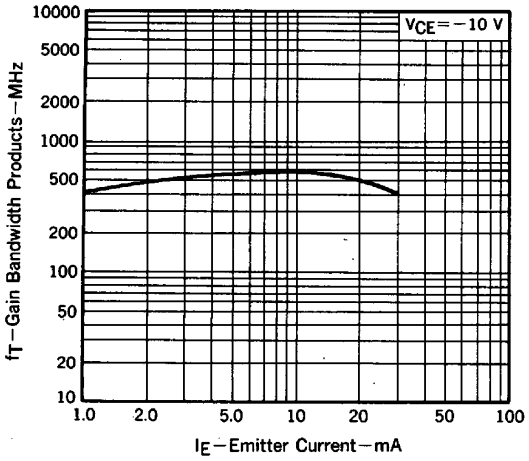
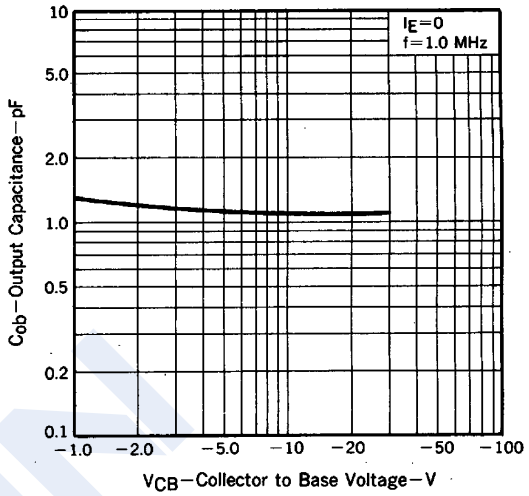
■ Typical Characterisitics

GAIN BANDWIDTH PRODUCTS vs. EMITTER CURRENT



OUTPUT CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE



INPUT CAPACITANCE vs. EMITTER TO BASE VOLTAGE