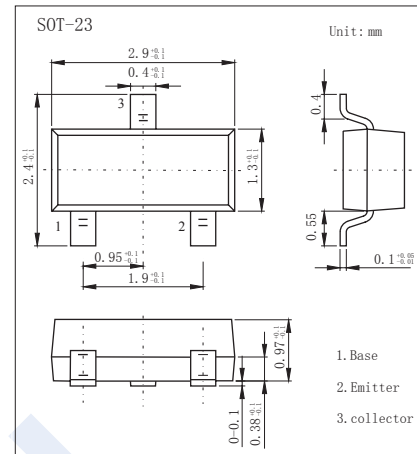


PNP Transistors

2SA1256

■ Features

- High fr (230MHz typ), and small Cre (1.1pF typ).
- Small NF (2.5dB typ).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-30	V
Collector-emitter voltage	V _{CEO}	-20	V
Emitter-base voltage	V _{EB0}	-5	V
Collector current	I _C	-30	mA
Collector dissipation	P _C	150	mW
Junction temperature	T _J	125	°C
Storage temperature	T _{stg}	-55 to +125	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = -100 μA, I _E =0	-30			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = -1 mA, I _B =0	-20			
Emitter - base breakdown voltage	V _{EB0}	I _E = -100 μA, I _C =0	-5			
Collector-base cut-off current	I _{CB0}	V _{CB} = -10 V, I _E =0			-100	nA
Emitter cut-off current	I _{EB0}	V _{EB} = -4V, I _C =0			-100	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-20 mA, I _B =-1mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-20 mA, I _B =-1mA			1.2	
DC current gain	h _{FE}	V _{CE} = -6V, I _C = -1mA	60		270	
Noise figure	NF	V _{CE} = -6V, I _C = -1mA, f=100MHz		2.5		dB
Voltage gain	PG			22		
Base-collector time constant	r _{bb} , C _c	V _{CE} = -6V, I _C = -1mA, f=31.9MHz		11	20	ps
Collector output capacitance	C _{re}	V _{CB} = -6V, f=10MHz		1.1	1.7	pF
Transition frequency	f _T	V _{CE} = -6V, I _C = -1mA	150	230		MHz

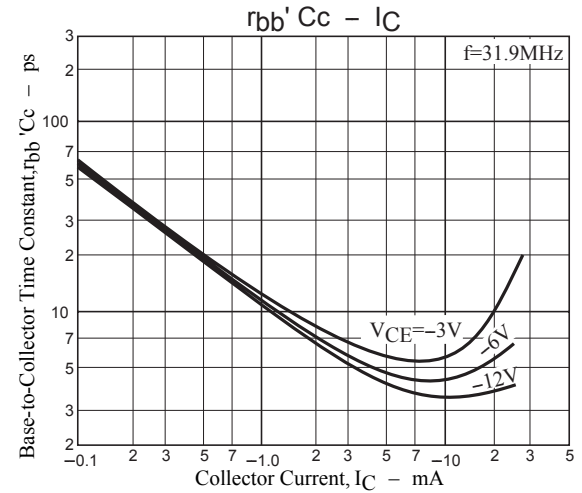
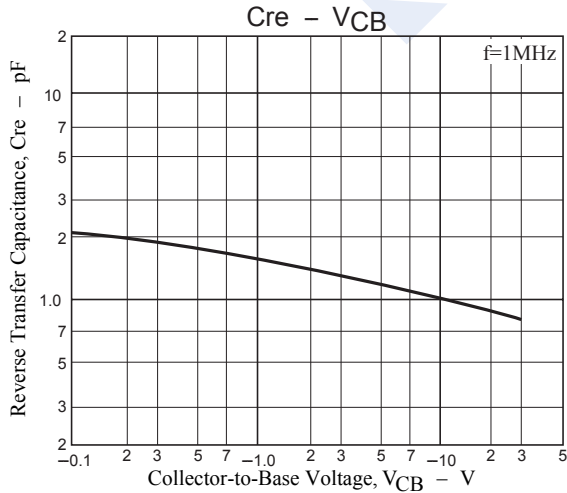
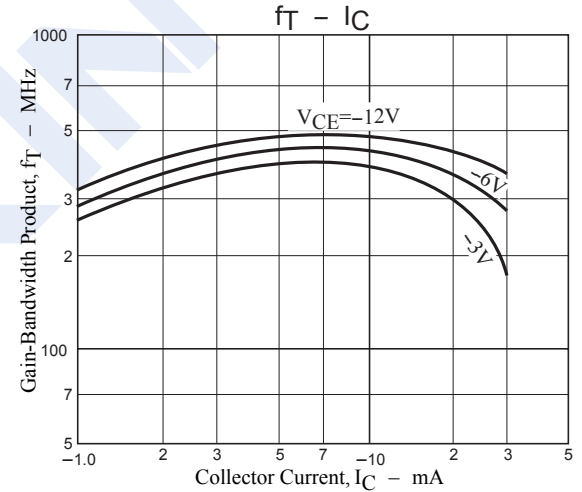
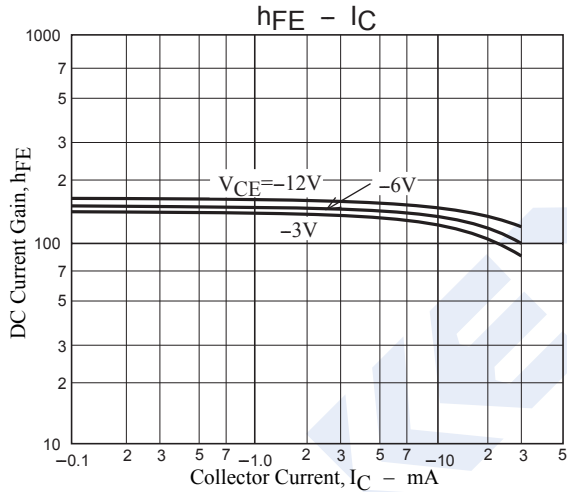
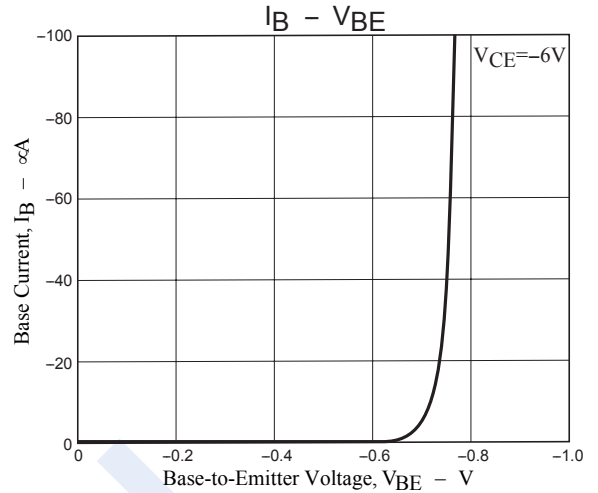
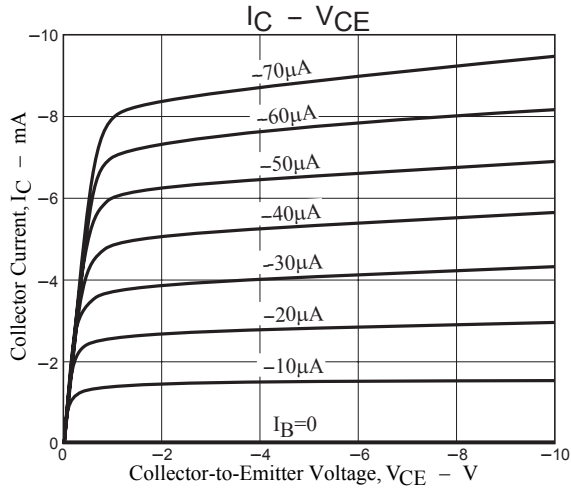
■ Classification of h_{FE}

Type	2SA1256-E3	2SA1256-E4	2SA1256-E5
Range	60-120	90-180	135-270
Marking	E3	E4	E5

PNP Transistors

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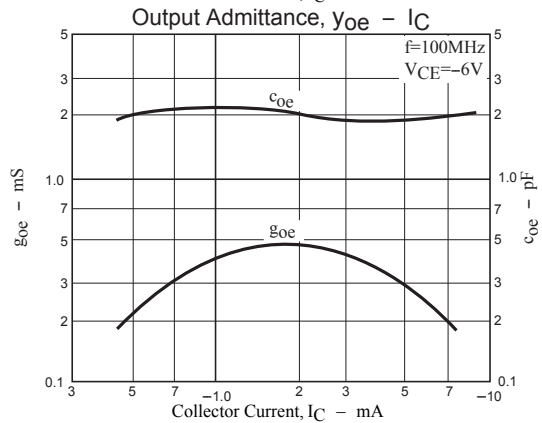
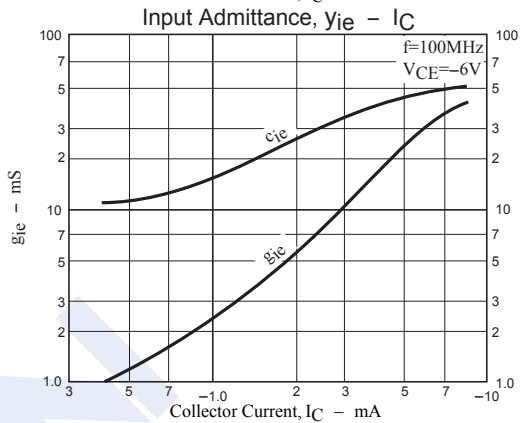
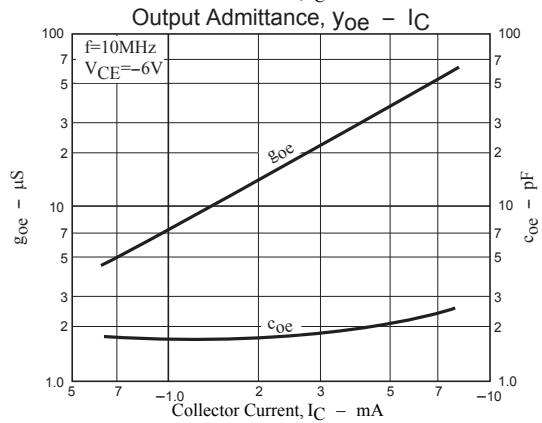
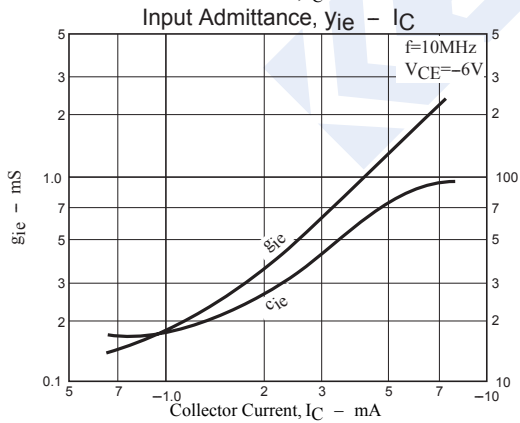
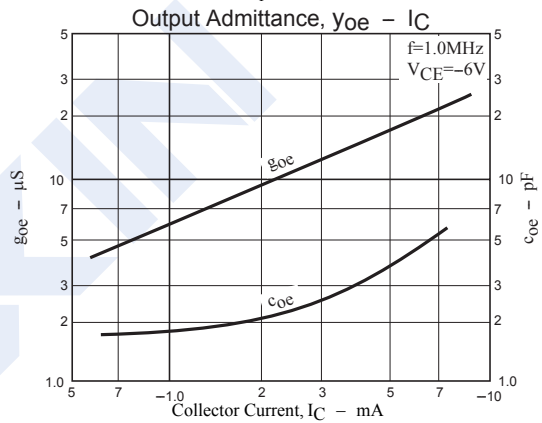
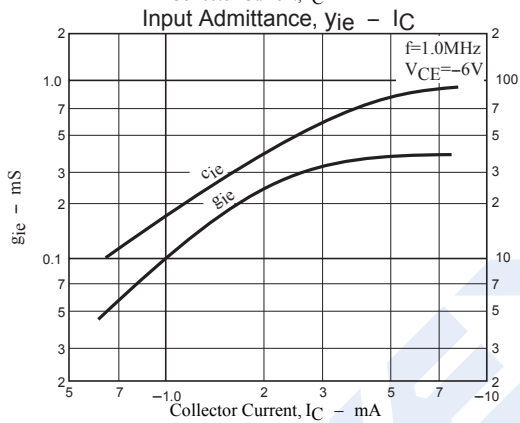
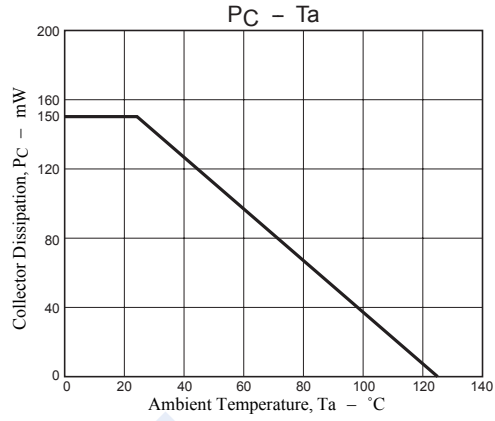
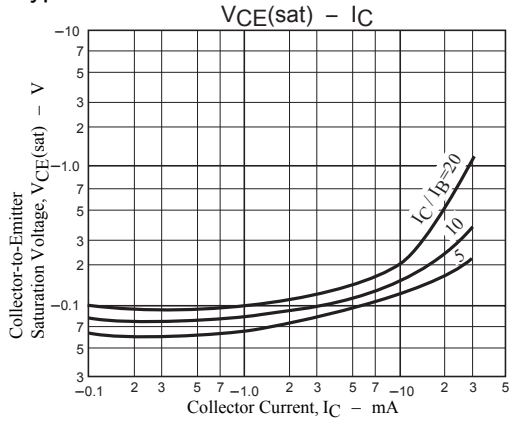
■ Typical Characteristics



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■ Typical Characteristics



PNP Transistors

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Typical Characteristics

