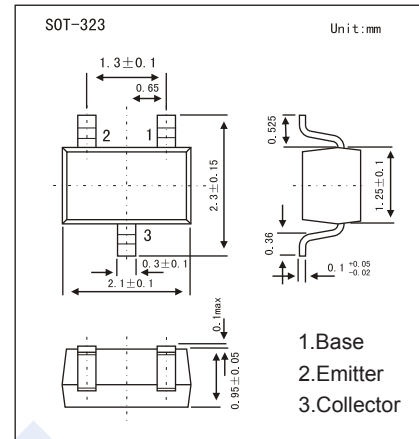


NPN Transistors

2SC4226

■ Features

- Collector Current Capability $I_C=100\text{mA}$
- Collector Emitter Voltage $V_{CE0}=12\text{V}$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	20	V
Collector - Emitter Voltage	V_{CEO}	12	
Emitter - Base Voltage	V_{EBO}	3	
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100 \mu\text{A}, I_E = 0$	20			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	12			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu\text{A}, I_C = 0$	3			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 10 \text{ V}, I_E = 0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 1 \text{ V}, I_C = 0$			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 3 \text{ V}, I_C = 7 \text{ mA}$	40		250	
Insertion Power Gain	$ S_{21e} ^2$	$V_{CE} = 3 \text{ V}, I_C = 7 \text{ mA}, f = 1 \text{ GHz}$	7			dB
Noise Figure	NF	$V_{CE} = 3 \text{ V}, I_C = 7 \text{ mA}, f = 1 \text{ GHz}$			2.5	
Feed back Capacitance	C_{re}	$V_{CE} = 3 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			1.5	pF
Transition frequency	f_T	$V_{CE} = 3 \text{ V}, I_C = 7 \text{ mA}$	3			GHz

Note.Pulse Measurement ; $PW \leq 350 \mu\text{s}$, Duty Cycle $\leq 2\%$ Pulsed.

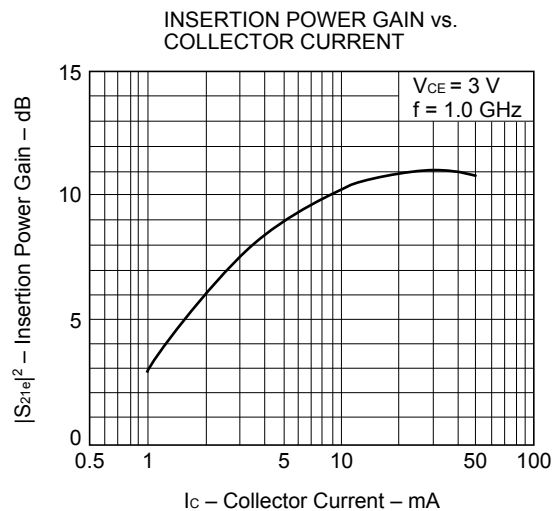
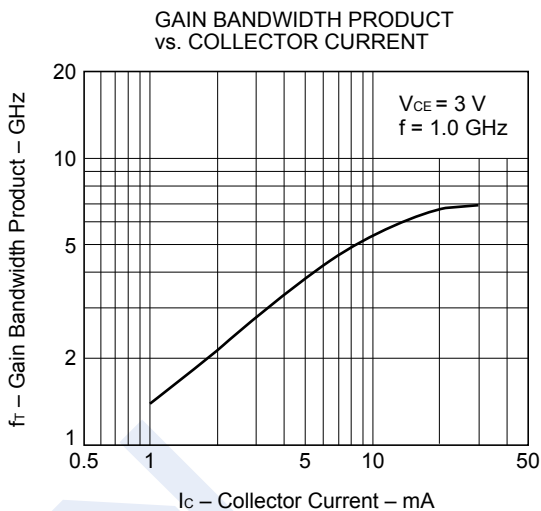
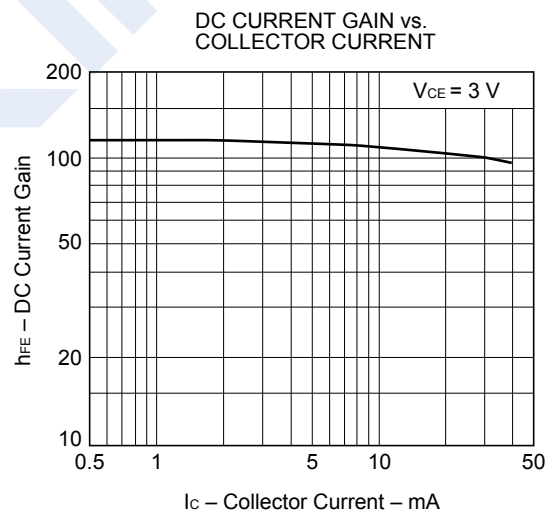
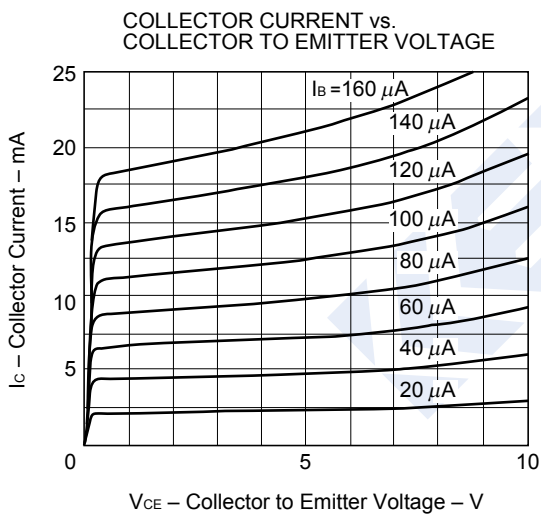
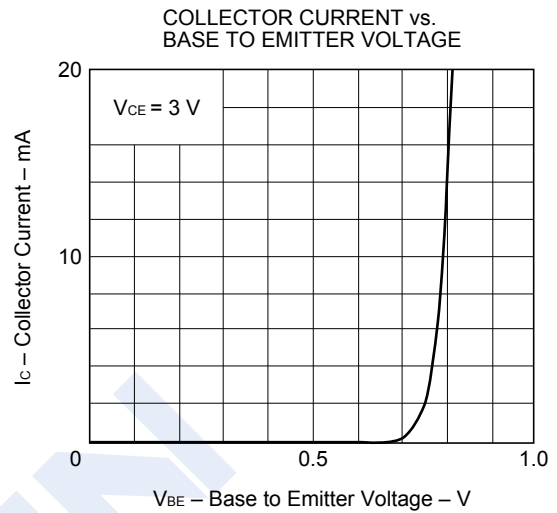
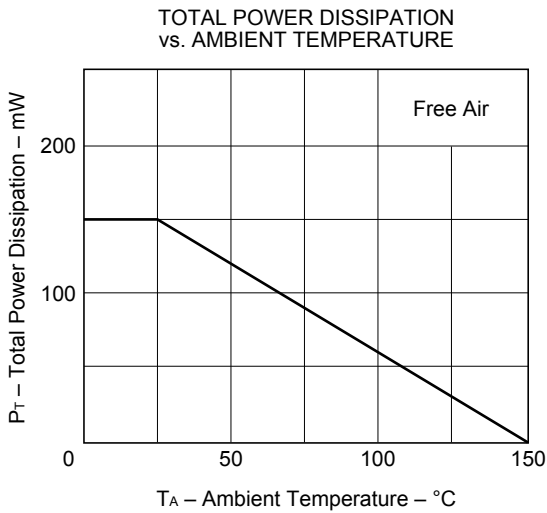
■ Classification of h_{FE}

Type	2SC4226-R23	2SC4226-R24	2SC4226-R25
Range	40-80	70-140	125-250
Marking	R23	R24	R25

NPN Transistors

2SC4226

■ Typical Characteristics



NPN Transistors

2SC4226

■ Typical Characteristics

