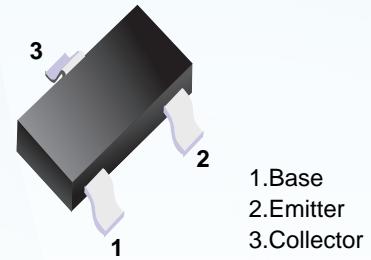


■ NPN Transistors

■ Simplified outline(SOT-323)
■ Features

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

■ 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	

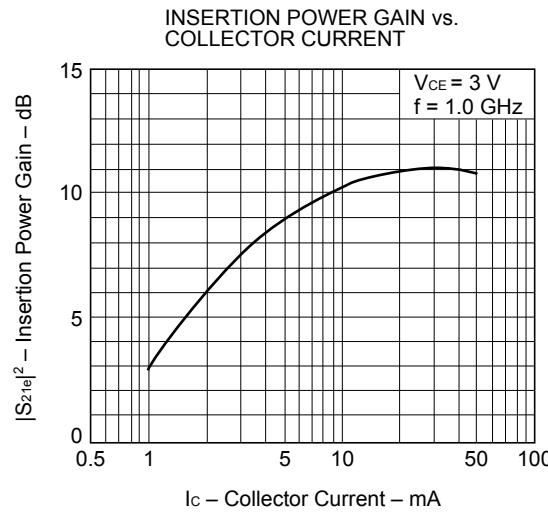
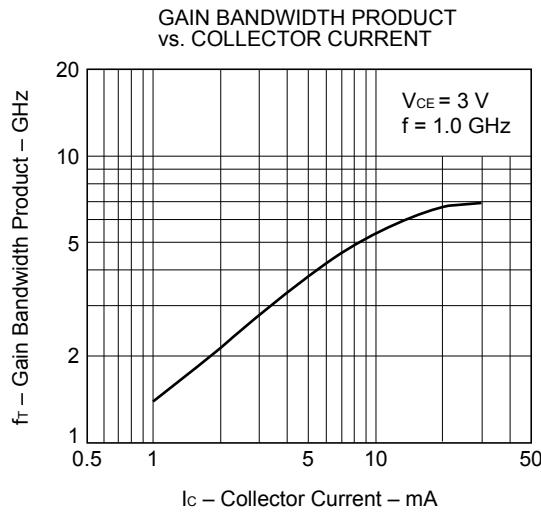
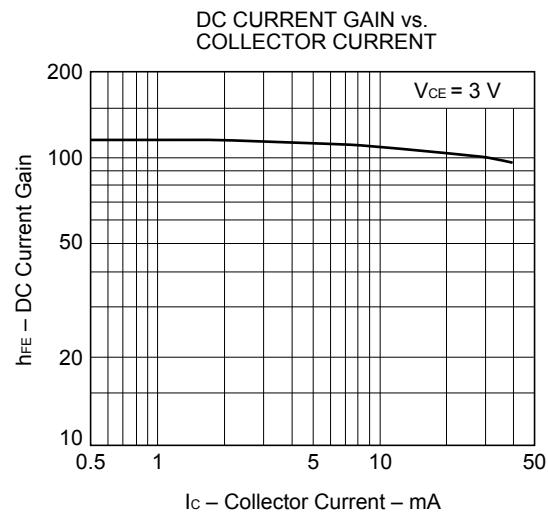
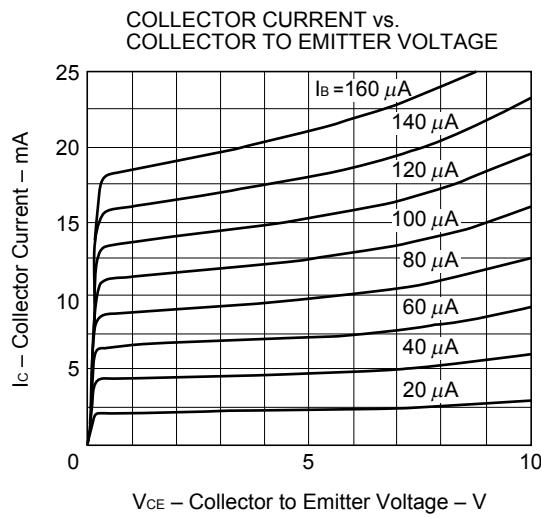
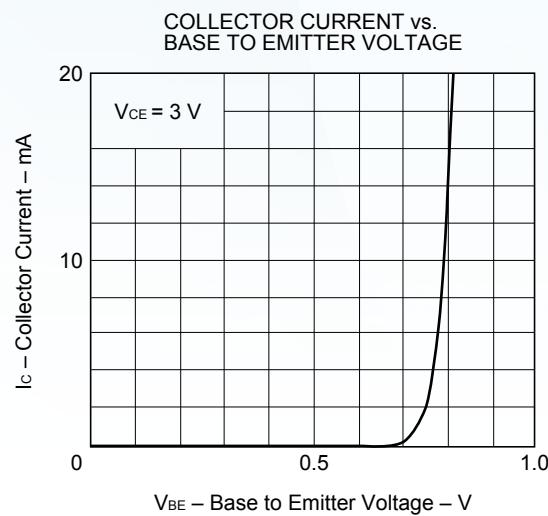
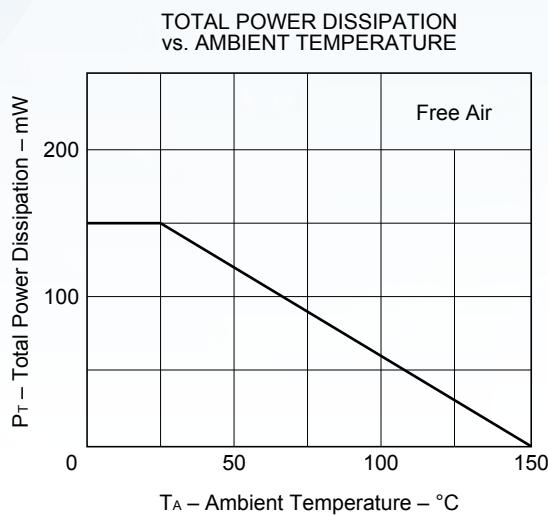
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

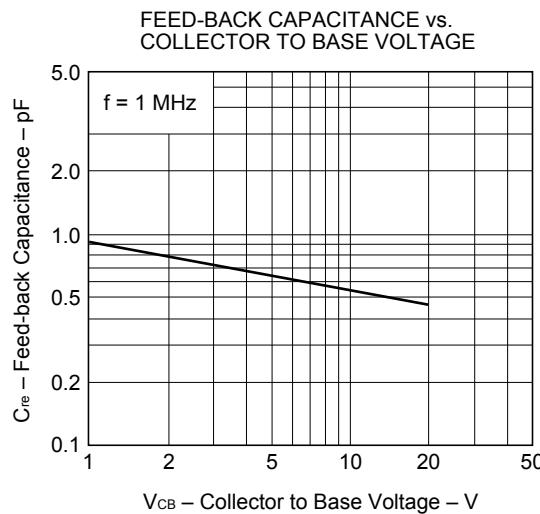
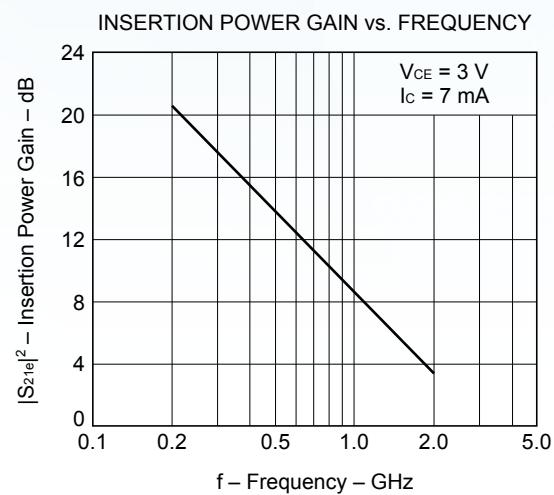
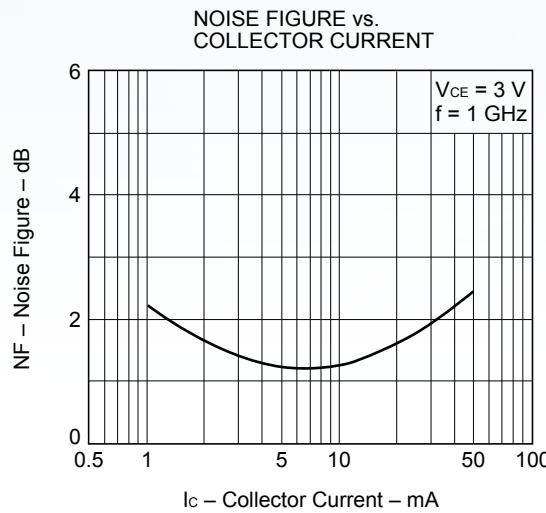
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_c = 100\text{ }\mu\text{A}, I_E = 0$	20			V
Collector- emitter breakdown voltage	V_{CEO}	$I_c = 1\text{ mA}, I_B = 0$	12			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\text{ }\mu\text{A}, I_c = 0$	3			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 10\text{ V}, I_E = 0$			1	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = 1\text{ V}, I_c = 0$			1	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_c = 100\text{ mA}, I_B = 10\text{mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(\text{sat})}$	$I_c = 100\text{ mA}, I_B = 10\text{mA}$			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

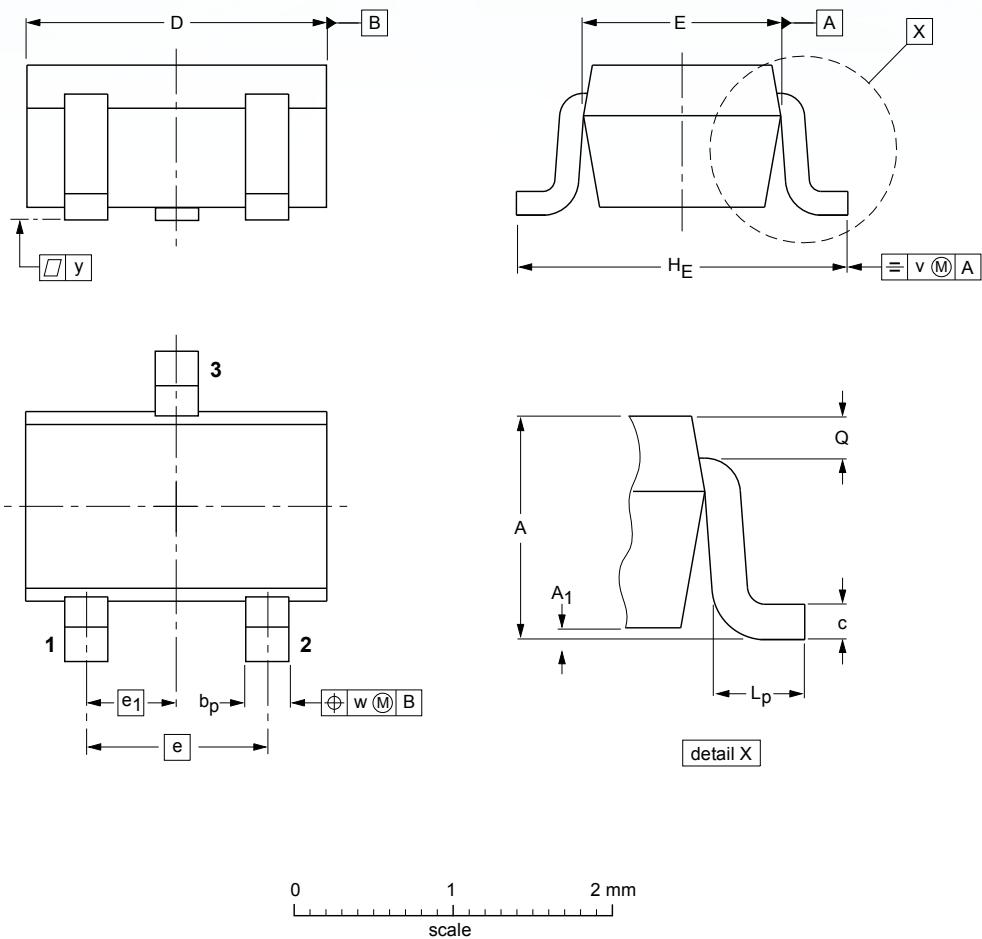
Note.Pulse Measurement ; PW $\leq 350\text{ }\mu\text{s}$, Duty Cycle $\leq 2\%$ Pulsed.

■ Classification of h_{FE}

Type	EV2SC4226-SM	EV2SC4226-SM	EV2SC4226-SM
Range	40-80	70-140	125-250
Marking	R23	R24	R25

■ Typical Characteristics


■ Typical Characteristics


■ SOT-323


DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1 max	b_p	c	D	E	e	e_1	H_E	L_p	Q	v	w
mm	1.1 0.8	0.1	0.4 0.3	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.23 0.13	0.2	0.2

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