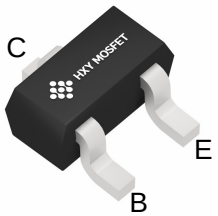
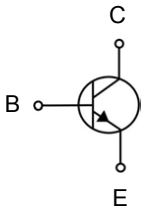
2SC4226
NPN Plastic-Encapsulate Transistors

Features

- Collector Current: I_C= 0.1A
- Power Dissipation of 150mw



SOT-323



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2SC4226	SOT-323	R2x	3000

x:From 4/5

Maximum Ratings (Ta=25℃ unless otherwise noted)

Symbl	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	0.1	A
P_C	Collector Power Dissipation	150	mW
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

Electrical Characteristics(Ta=25℃ unless otherwise specified)

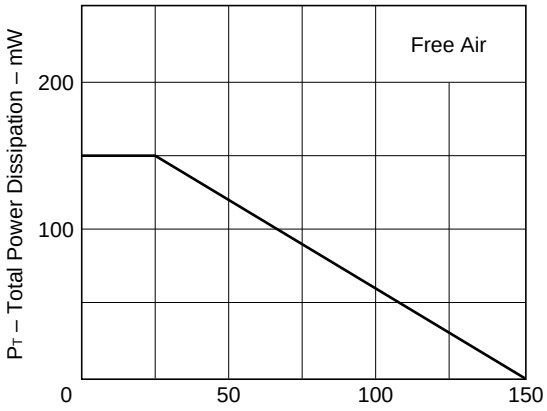
Parameter	Symbl	Min	Typ	Max	Unit	Test Condition
Collector-base breakdown voltage	V_{CBO}	20			V	IC=1.0μA
Collector cut- off current	ICBO			0.1	μA	VCB=10V
Emitter cut-off current	IEBO			0.1	μA	VEB=1V
DC current gain	hFE	60	150	300		VCE=3V,IC=7mA
Transit frequency	fT	3.5	4.5		GHz	VCE=3V,IC=7mA
Output feedback capacitance	Cre		0.65	1.0	pF	VCB=10V,IE=0mA,f=1MHz
Power gain	| S21e |2		9.5		dB	VCE=3V,IC=3mA,f=1GHz
			10.7		dB	VCE=3V,IC=5mA,f=1GHz
			11		dB	VCE=3V,IC=7mA,f=1GHz
			11.6		dB	VCE=3V,IC=10mA,f=1GHz
Noise factor	NF		1.4 1.6	2.0 2.3	dB	VCE=3V,IC=7mA,f=1GHz VCE=10V,Ic=5mA,f=1GHz

Classifiction Of h_{FE}

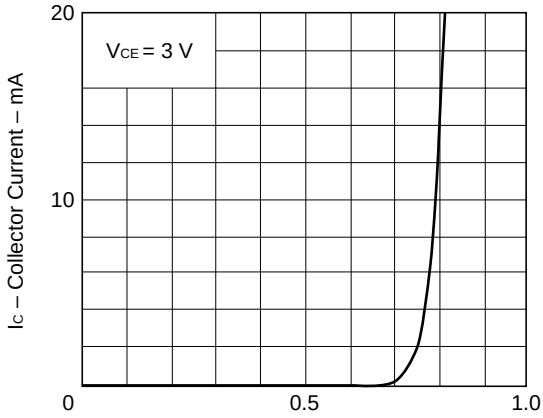
Rank	A	B	C	D	E
Marking	R24		R25		
Range	60-100	90-140	130-180	170-250	250-300

Typical Characteristics

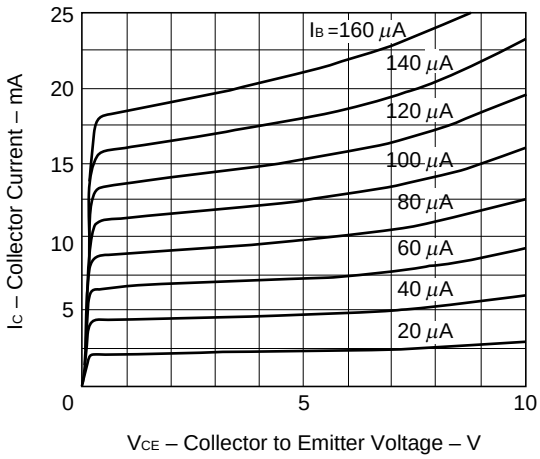
TOTAL POWER DISSIPATION
vs. AMBIENT TEMPERATURE



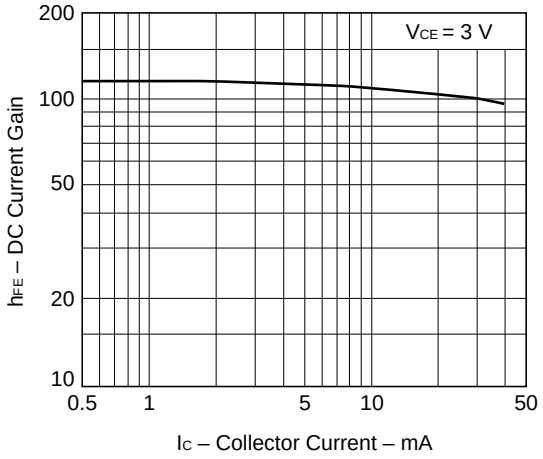
COLLECTOR CURRENT vs.
BASE TO EMITTER VOLTAGE



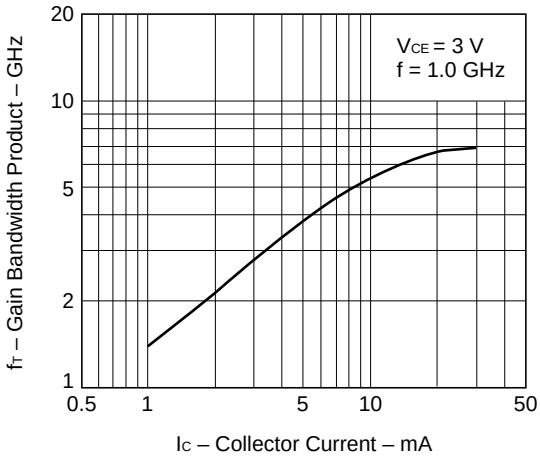
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



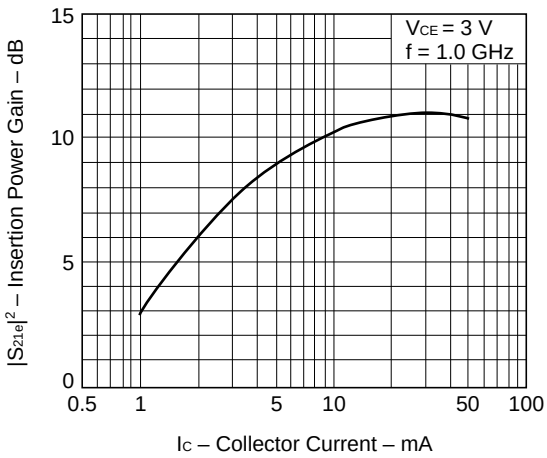
DC CURRENT GAIN vs.
COLLECTOR CURRENT



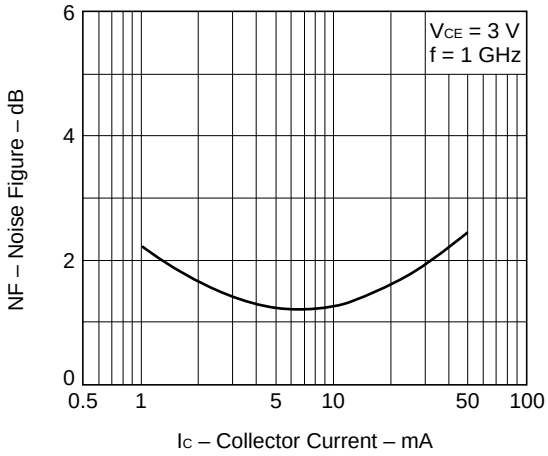
GAIN BANDWIDTH PRODUCT
vs. COLLECTOR CURRENT



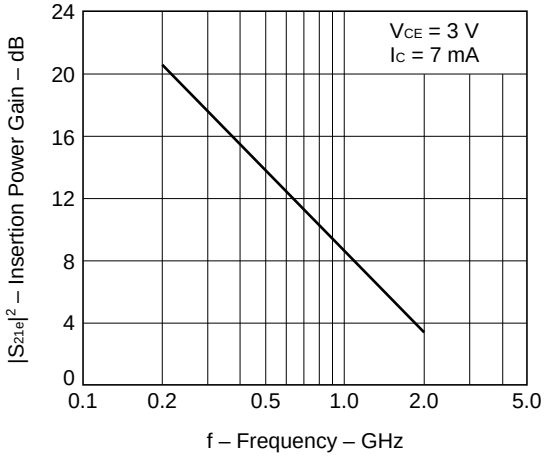
INSERTION POWER GAIN vs.
COLLECTOR CURRENT



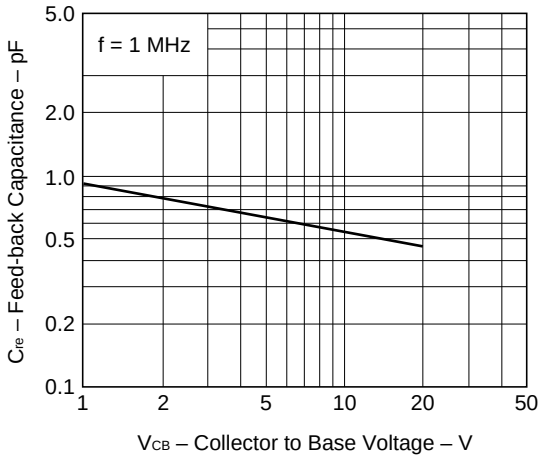
NOISE FIGURE vs.
COLLECTOR CURRENT



INSERTION POWER GAIN vs. FREQUENCY

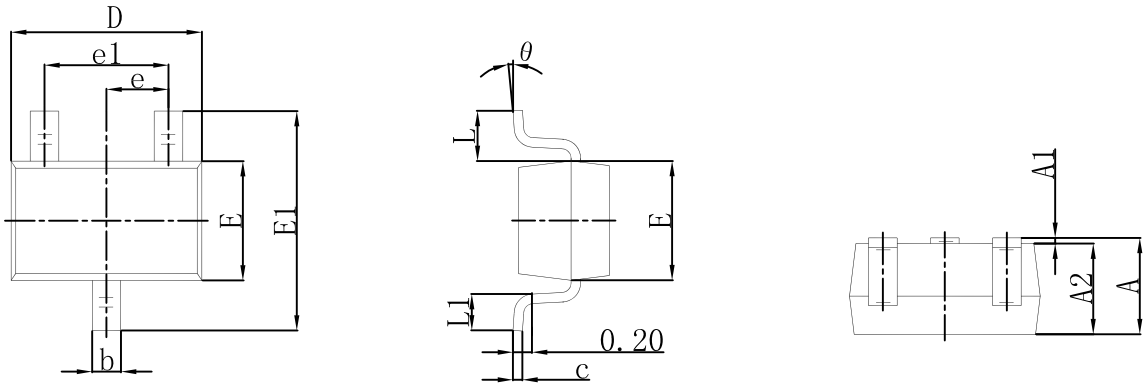


FEED-BACK CAPACITANCE vs.
COLLECTOR TO BASE VOLTAGE



Package Dimensions

SOT-323



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
K	0°	8°	0°	8°

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