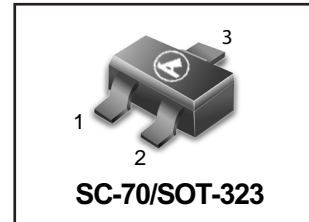
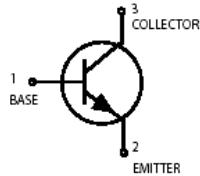


High-Frequency Amplifier Transistor

L2SC4226QT1



DESCRIPTION

The L2SC4226QT1 is a low supply voltage transistor designed for VHF, UHF low noise amplifier.

It is suitable for a high density surface mount assembly since the transistor has been applied small mini mold package.

FEATURES

- Low Noise
NF = 1.2 dB TYP. @ f = 1 GHz, $V_{CE} = 3\text{ V}$, $I_c = 7\text{ mA}$
- High Gain
 $|S_{21e}|^2 = 9.0\text{ dB TYP. @ f = 1 GHz, } V_{CE} = 3\text{ V, } I_c = 7\text{ mA}$
- Small Mini Mold Package
EIAJ: SC-70

L2SC4226QT1**ABSOLUTE MAXIMUM RATINGS (T_A = 25 °C)**

Collector to Base Voltage	V _{CBO}	20	V
Collector to Emitter Voltage	V _{CEO}	12	V
Emitter to Base Voltage	V _{EBO}	3	V
Collector Current	I _C	100	mA
Total Power Dissipation	P _T	150	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25 °C)

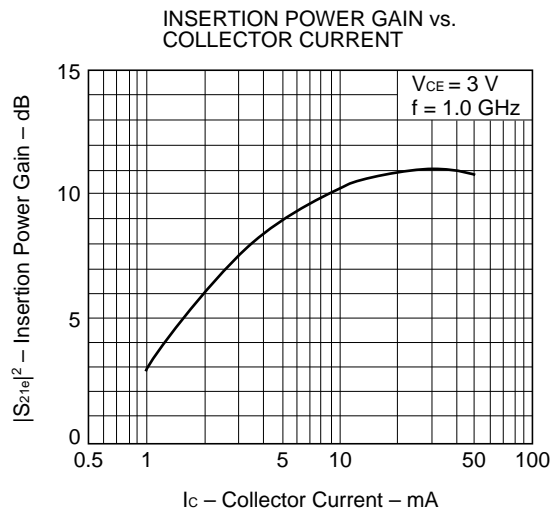
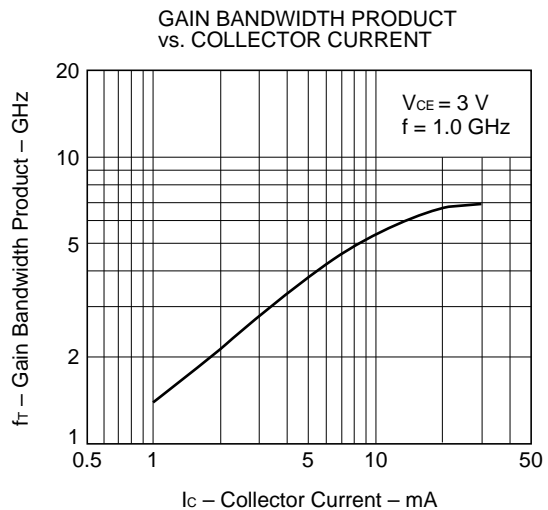
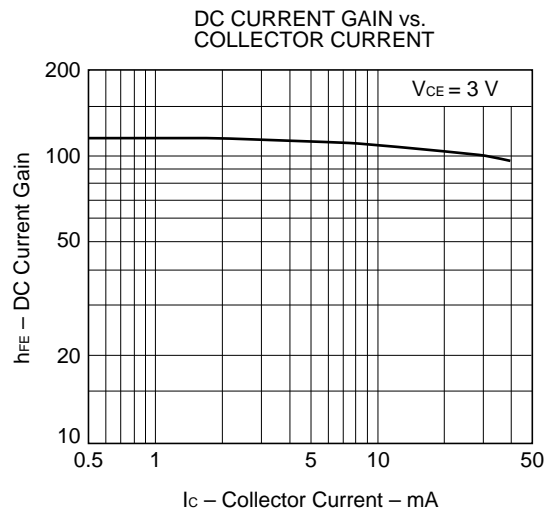
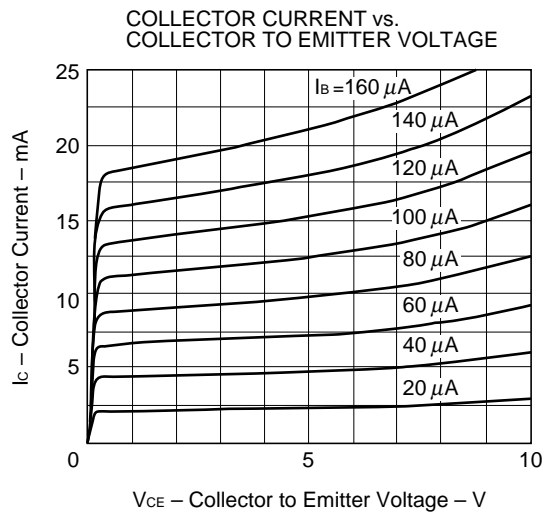
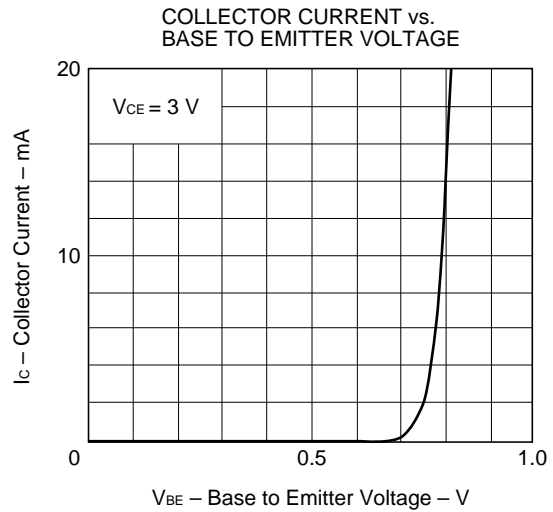
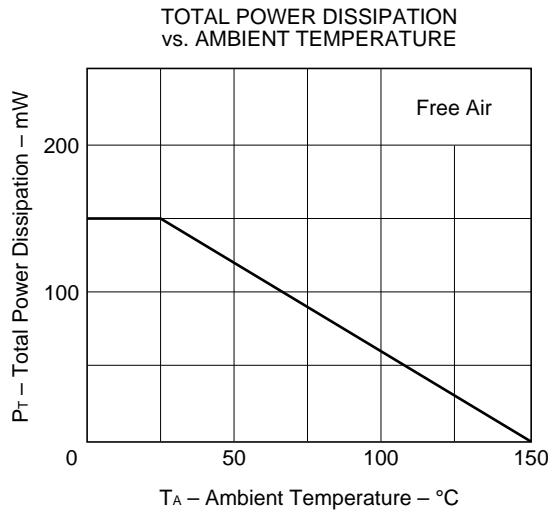
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Collector Cutoff Current	I _{CBO}			1.0	μA	V _{CB} = 10 V, I _E = 0
Emitter Cutoff Current	I _{EBO}			1.0	μA	V _{EB} = 1 V, I _C = 0
DC Current Gain	h _{FE}	125		250		V _{CE} = 3 V, I _C = 7 mA* ¹
Gain Bandwidth Product	f _T	3.0	4.5		GHz	V _{CE} = 3 V, I _C = 7 mA
Feed back Capacitance	C _{re}		0.7	1.5	pF	V _{CE} = 3 V, I _E = 0, f = 1 MHz* ²
Insertion Power Gain	S _{21e} ²	7	9		dB	V _{CE} = 3 V, I _C = 7 mA, f = 1 GHz
Noise Figure	NF		1.2	2.5	dB	V _{CE} = 3 V, I _C = 7 mA, f = 1 GHz

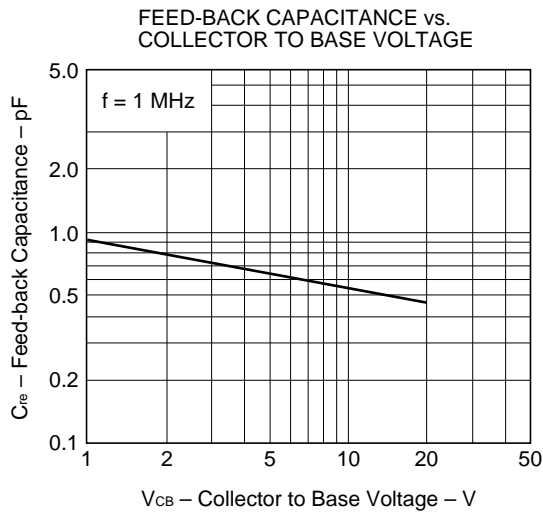
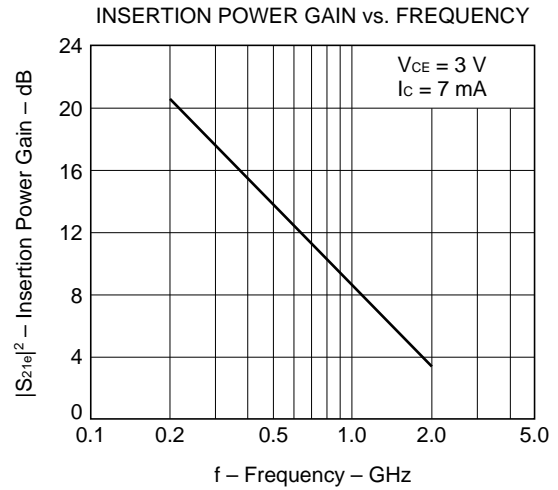
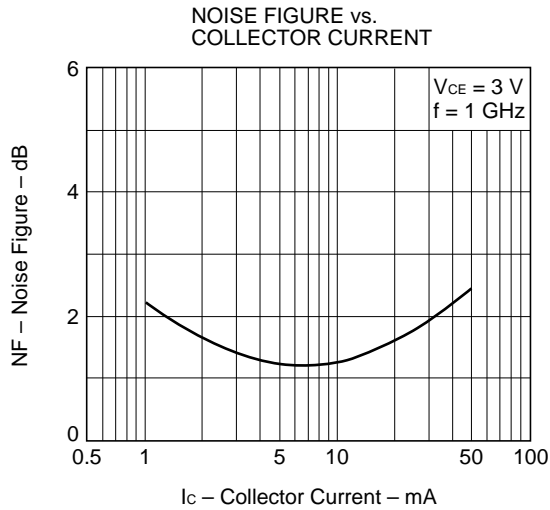
*1 Pulse Measurement ; PW ≤ 350 μs, Duty Cycle ≤ 2 % Pulsed.

*2 Measured with 3 terminals bridge, Emitter and Case should be grounded.

TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

L2SC4226QT1



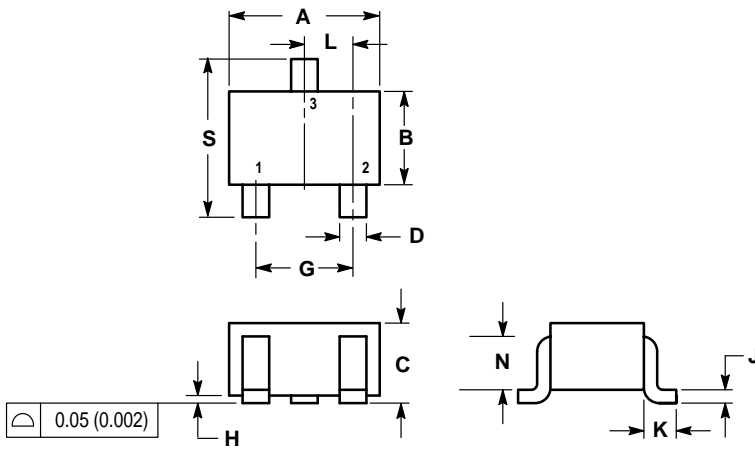
L2SC4226QT1


L2SC4226QT1

SC-70 / SOT-323

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.032	0.040	0.80	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017 REF		0.425 REF	
L	0.026 BSC		0.650 BSC	
N	0.028 REF		0.700 REF	
S	0.079	0.095	2.00	2.40

- PIN 1. BASE
 2. EMITTER
 3. COLLECTOR

