

DESCRIPTION

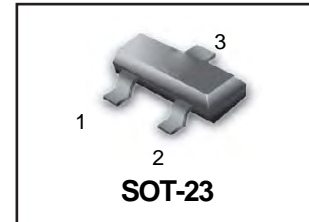
The 2SC3356RLT1 is an NPN silicon epitaxial transistor designed for low noise amplifier at VHF, UHF and CATV band.

It has dynamic range and good current characteristic.

S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

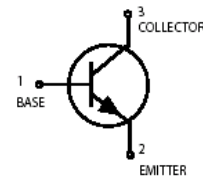
ORDERING INFORMATION

Device	Marking	Shipping
2SC3356RLT1G S-2SC3356RLT1G	24R	3000/Tape & Reel
2SC3356RLT3G S-2SC3356RLT3G	24R	10000/Tape & Reel



FEATURES

- We declare that the material of product compliance with RoHS requirements.
- Low Noise and High Gain
NF = 1.1 dB TYP., $G_a = 11$ dB TYP. @ $V_{CE} = 10$ V, $I_c = 7$ mA, $f = 1.0$ GHz
- High Power Gain
MAG = 13 dB TYP. @ $V_{CE} = 10$ V, $I_c = 20$ mA, $f = 1.0$ GHz



ABSOLUTE MAXIMUM RATINGS ($T_A = 25$ °C)

Collector to Base Voltage	V_{CBO}	20	V
Collector to Emitter Voltage	V_{CEO}	9	V
Emitter to Base Voltage	V_{EBO}	3.0	V
Collector Current	I_c	100	mA
Total Power Dissipation	P_T	200	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 CONDITIONS
Collector Cutoff Current	I_{CBO}			1.0	μA	$V_{CB} = 10$ V, $I_E = 0$
Emitter Cutoff Current	I_{EBO}			1.0	μA	$V_{EB} = 1.0$ V, $I_C = 0$
DC Current Gain	h_{FE}	75	170	290		$V_{CE} = 8$ V, $I_c = 25$ mA
Gain Bandwidth Product	f_T		7		GHz	$V_{CE} = 10$ V, $I_c = 20$ mA
Feed-Back Capacitance	C_{re}^{**}		0.55	1.0	pF	$V_{CB} = 10$ V, $I_E = 0$, $f = 1.0$ MHz
Insertion Power Gain	$ S_{21e} ^2$		11.5		dB	$V_{CE} = 10$ V, $I_c = 20$ mA, $f = 1.0$ GHz
Noise Figure	NF		1.1	2.0	dB	$V_{CE} = 10$ V, $I_c = 7$ mA, $f = 1.0$ GHz

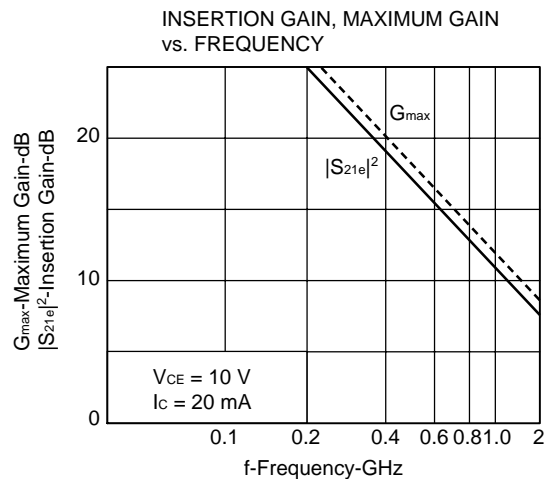
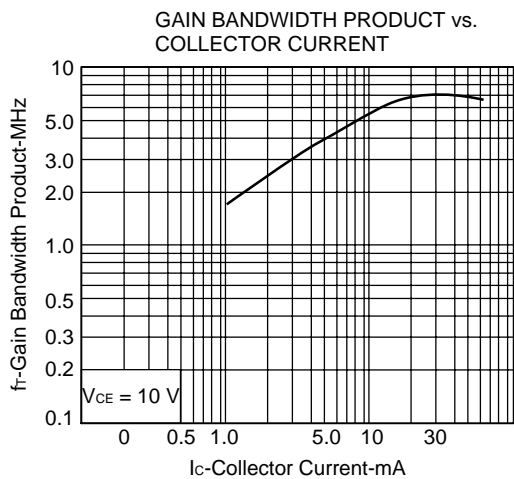
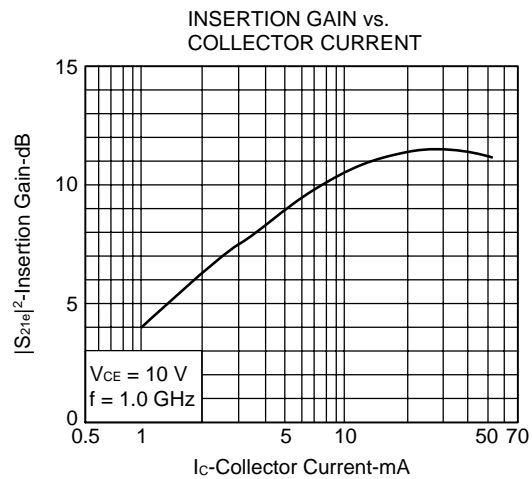
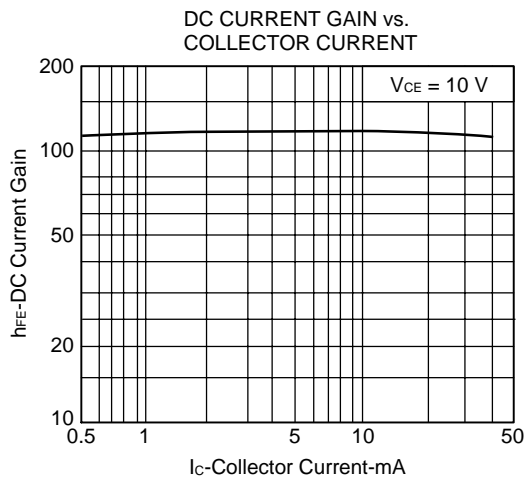
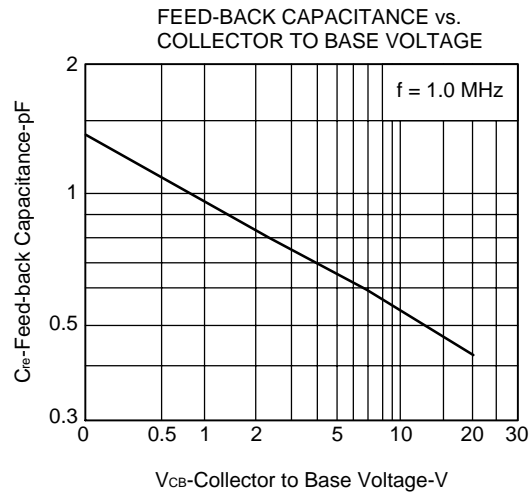
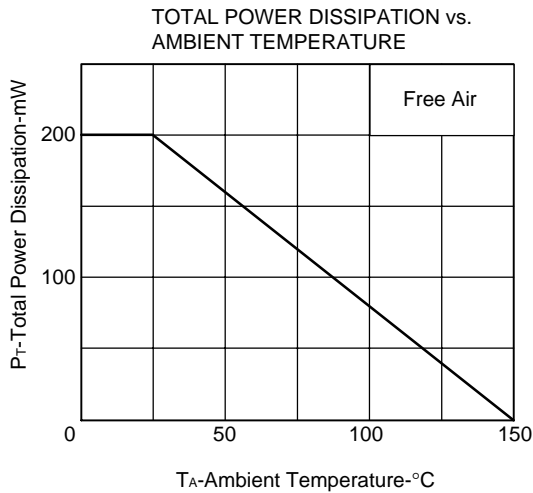
* Pulse Measurement $PW \leq 350$ μs , Duty Cycle ≤ 2 %

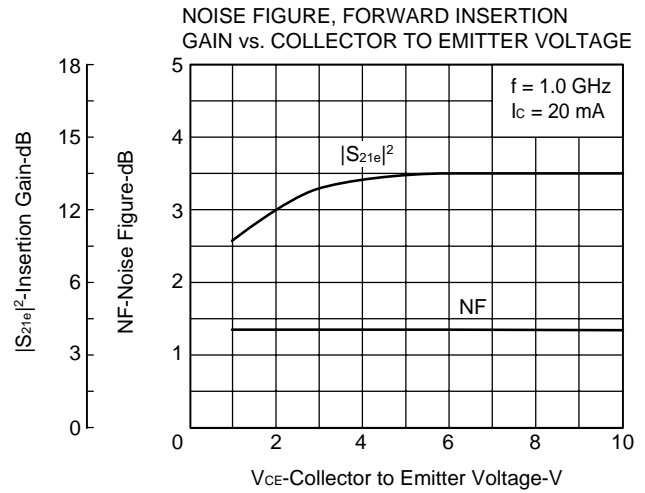
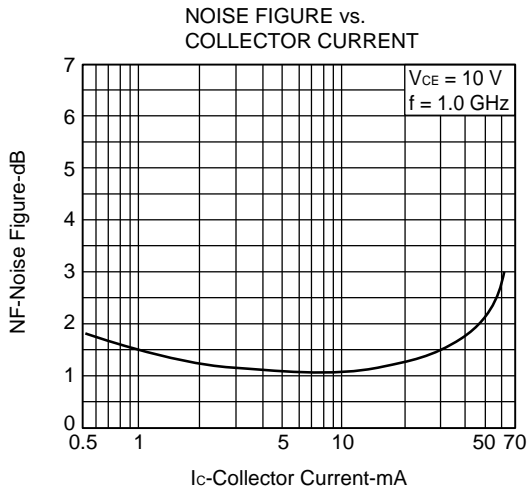
* The emitter terminal and the case shall be connected to the guard terminal of the three-terminal capacitance bridge.

Driver Marking

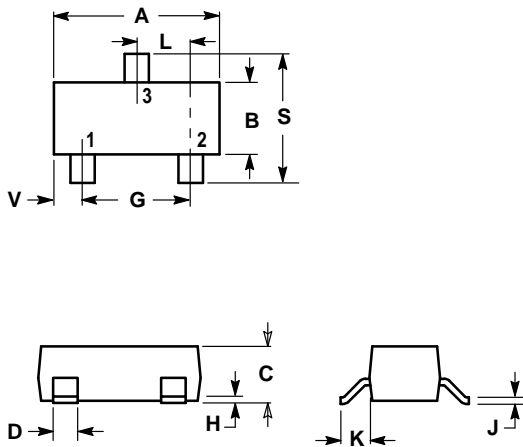
2SC3356RLT1G=24R

TYPICAL CHARACTERISTICS (T_A = 25 °C)





SOT-23



NOTES:

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

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- PIN 1. BASE
 2. EMITTER
 3. COLLECTOR

