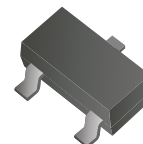


2SC3356-G Series

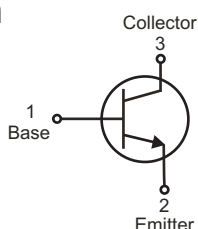
RoHS Device



Features

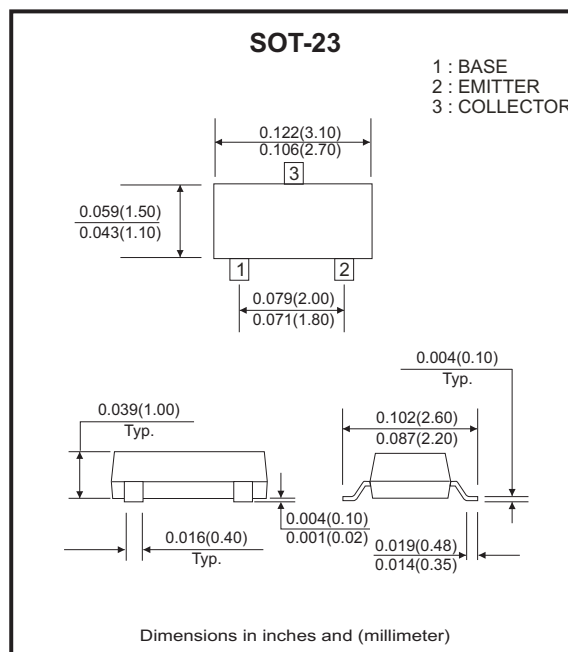
- Low noise and high gain.
- High power gain.
- Designed for low noise amplifier.

Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base voltage	V_{CB0}	20	V
Collector-Emitter voltage	V_{CE0}	12	V
Emitter-Base voltage	V_{EB0}	3	V
Collector current - continuous	I_C	100	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-65~+150	°C



Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Collector-Base breakdown voltage	$I_C = 10\mu A, I_E = 0$	$V_{(BR)CBO}$	20			V
Collector-Emitter breakdown voltage	$I_C = 1mA, I_B = 0$	$V_{(BR)CEO}$	12			V
Emitter-Base breakdown voltage	$I_E = 10\mu A, I_C = 0$	$V_{(BR)EBO}$	3			V
Collector cut-off current	$V_{CB} = 10V, I_E = 0$	I_{CBO}			1	μA
Emitter cut-off current	$V_{EB} = 1V, I_C = 0$	I_{EBO}			1	μA
DC current gain	$V_{CE} = 10V, I_C = 20mA$	h_{FE}	50	120	300	
Transition frequency	$V_{CE} = 10V, I_C = 20mA$	f_T		7		GHz
Insertion power gain	$V_{CE} = 10V, I_C = 20mA, f = 1GHz$	$ S_{21e} ^2$		11.5		dB
Feed-back capacitance	$V_{CB} = 10V, I_E = 0, f = 1MHz$	C_{re}		0.55	1.0	pF
Noise Figure	$V_{CB} = 10V, I_C = 7mA, f = 1GHz$	NF		1.1	2.0	dB

Classification Of hFE

Part No.	2SC3356Q-G	2SC3356R-G	2SC3356S-G
Range	50-100	80-160	125-250
Marking	R23	R24	R25

RATING AND CHARACTERISTIC CURVES (2SC3356-G)

Fig.1 - Total Power Dissipation Vs. Ambient Temperature

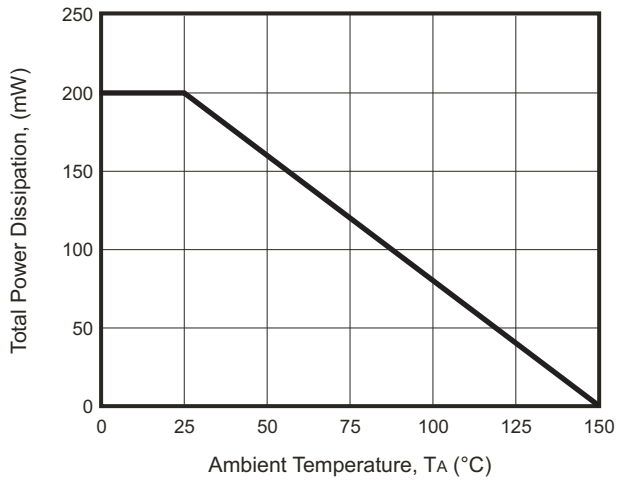


Fig.2 - Feed-back Capacitance Vs. Collector To Base Voltage

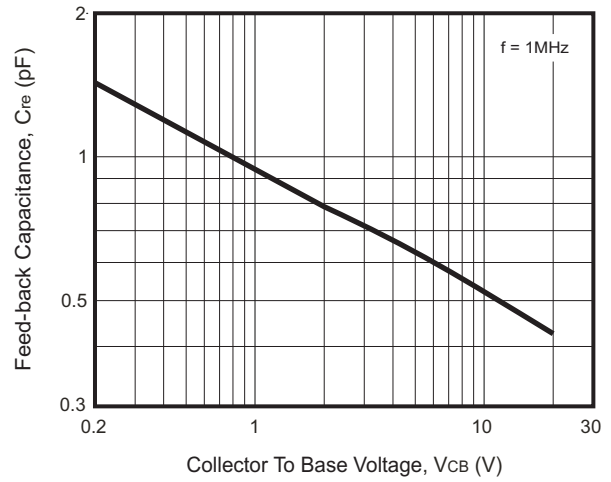


Fig.3 - Dc Current Gain Vs. Collector Current

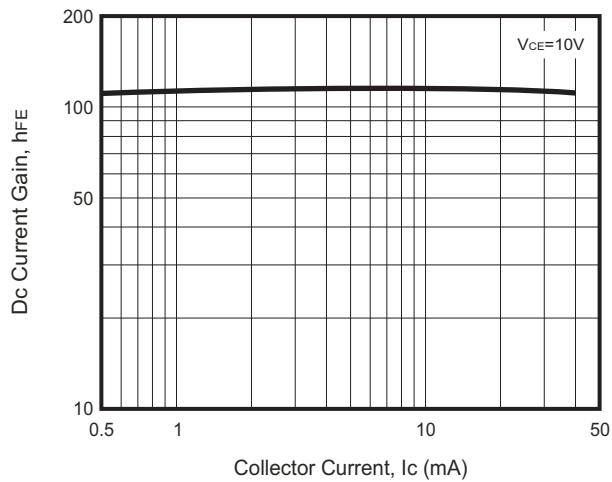


Fig.4 - Insertion Gain Vs. Collector Current

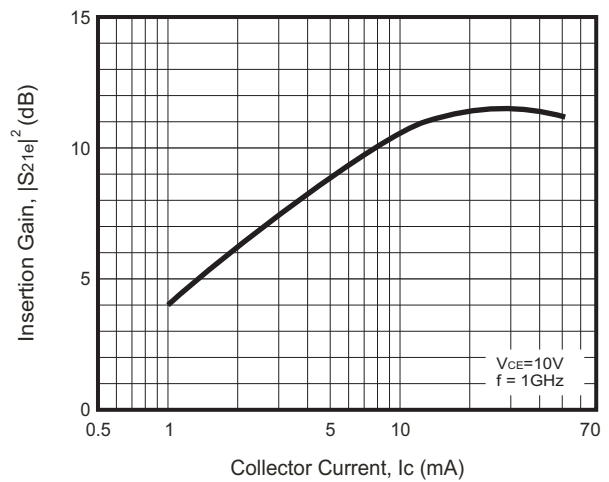


Fig.5 - Gain Bandwidth Product Vs. Collector Current

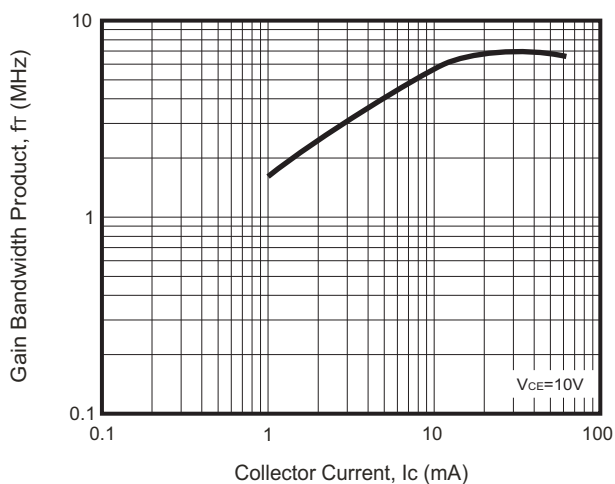
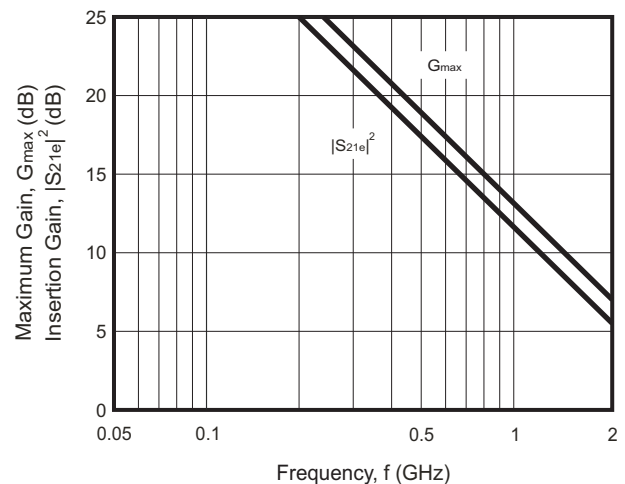


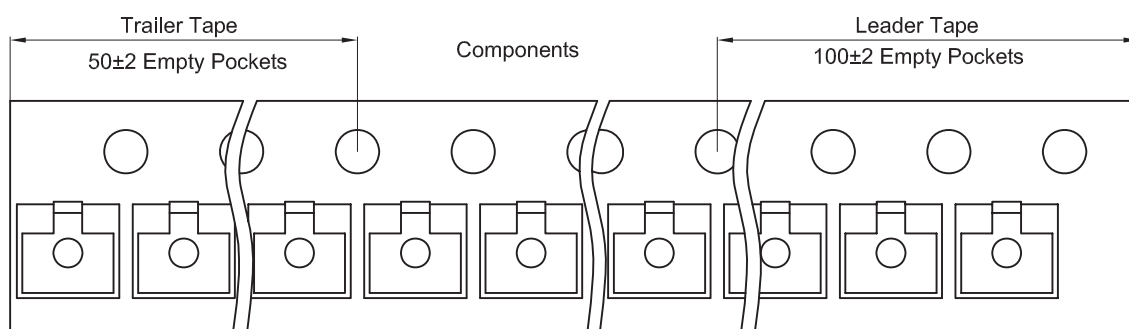
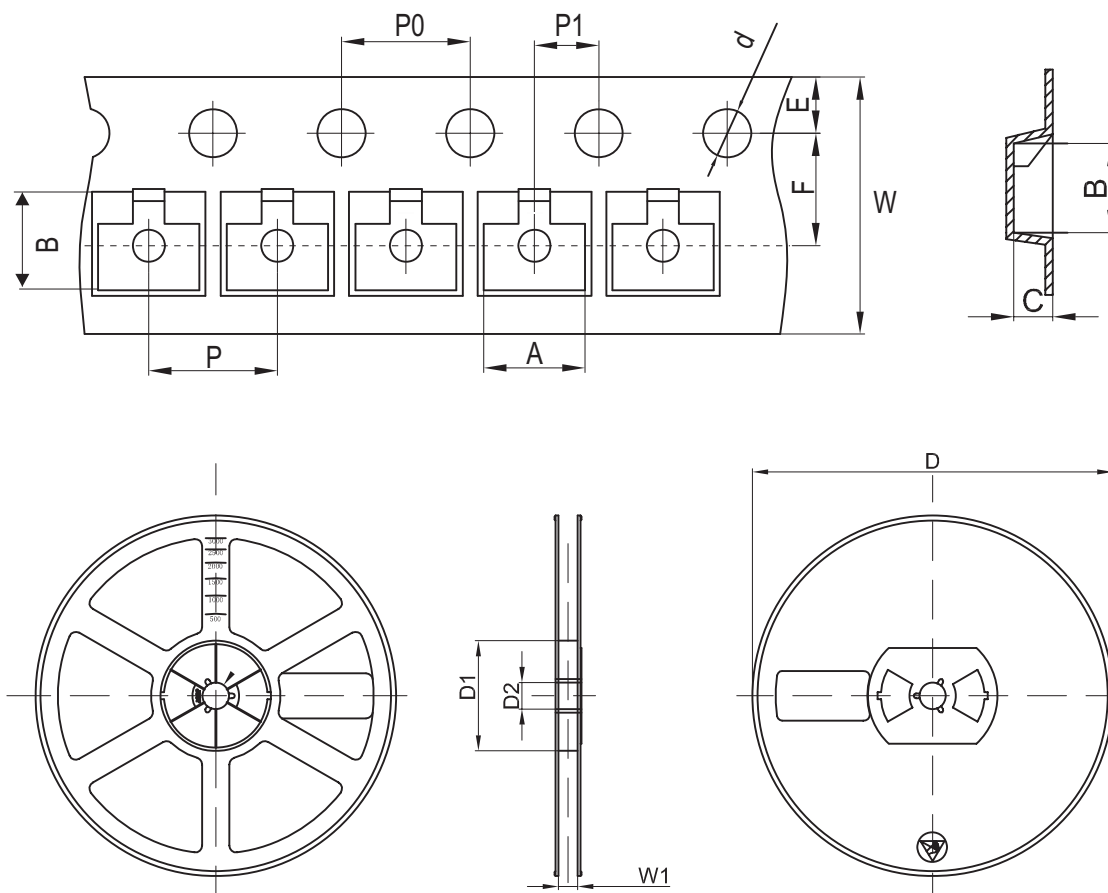
Fig.6 - Insertion Gain, Max. Gain Vs. Frequency



Company reserves the right to improve product design, functions and reliability without notice.

REV: A

Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178 ± 2.0	54.40 ± 1.0	13.00 ± 1.0
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

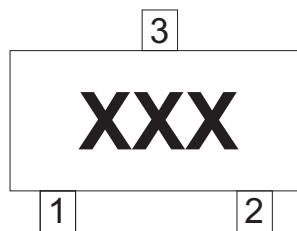
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	$8.00 \pm 0.30 / - 0.10$	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.004	$0.315 \pm 0.012 / - 0.004$	0.374 ± 0.039

Company reserves the right to improve product design , functions and reliability without notice.

REV: A

Marking Code

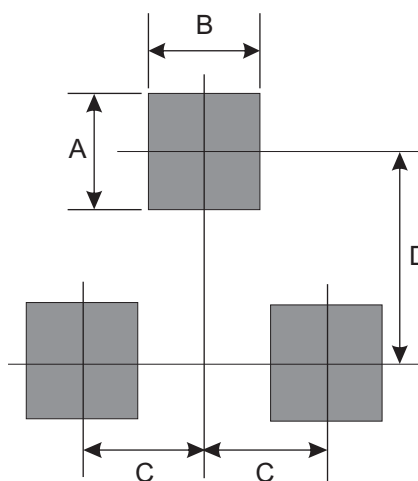
Part Number	Marking Code
2SC3356Q-G	R23
2SC3356R-G	R24
2SC3356S-G	R25



XXX = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.032
C	0.95	0.037
D	2.00	0.079



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7