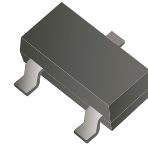


2SC3356-G Series

RoHS Device



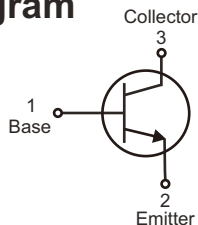
Features

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

Mechanical data

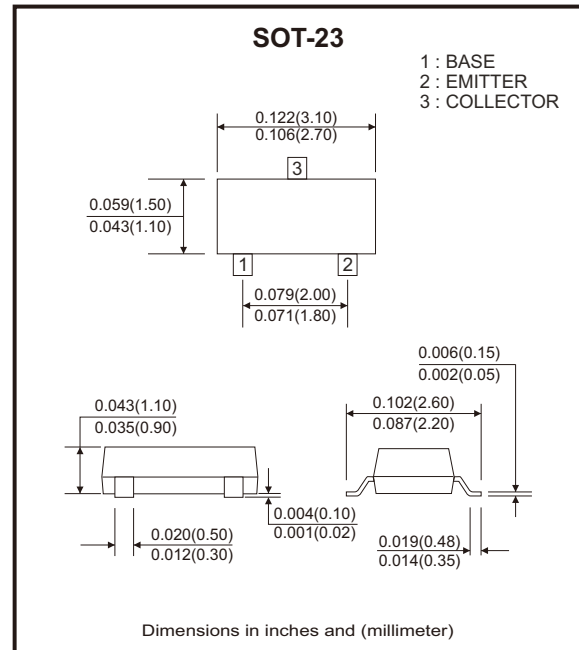
- Case: SOT-23, molded plastic.
- Mounting position: Any.

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 _{CEO}	12	V
Emitter-Base voltage	V _{EBO}	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 = 10μA, 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 = 10μA, 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}	80	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
Output capacitance	V _{CB} = 10V, I _E = 0, f = 1MHz	C _{ob}		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.	2SC3356R-G	2SC3356S-G
Range	80-160	125-250

Rating and Characteristic Curves (2SC3356-G)

Fig.1 - Total Power Dissipation Vs. Ambient Temperature

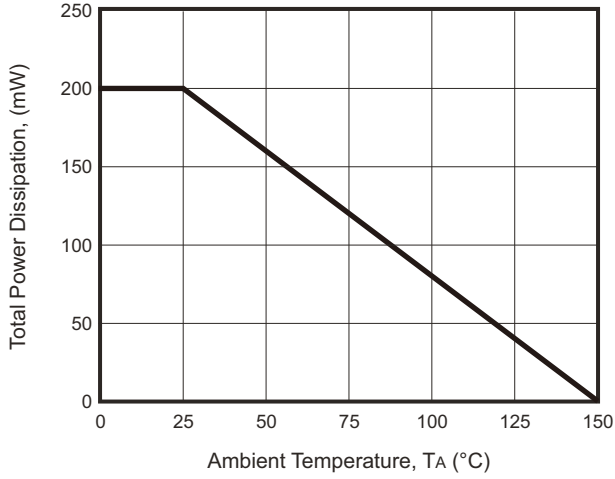


Fig.2 - Output capacitance Vs. Collector To Base Voltage

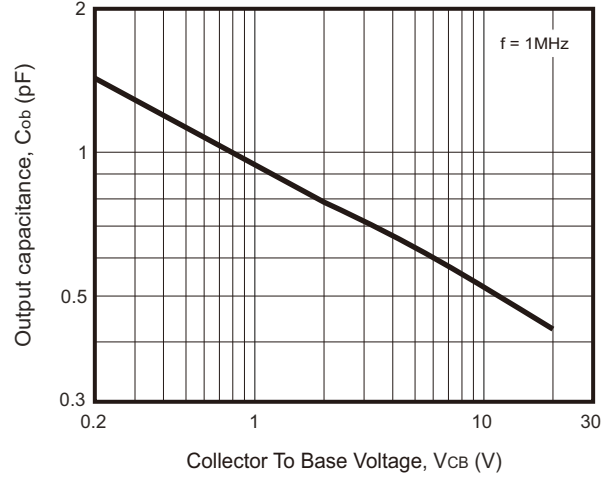


Fig.3 - Dc Current Gain Vs. Collector Current

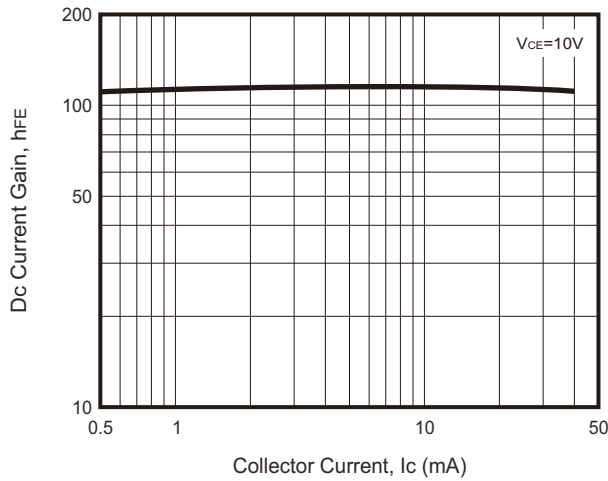


Fig.4 - Insertion Gain Vs. Collector Current

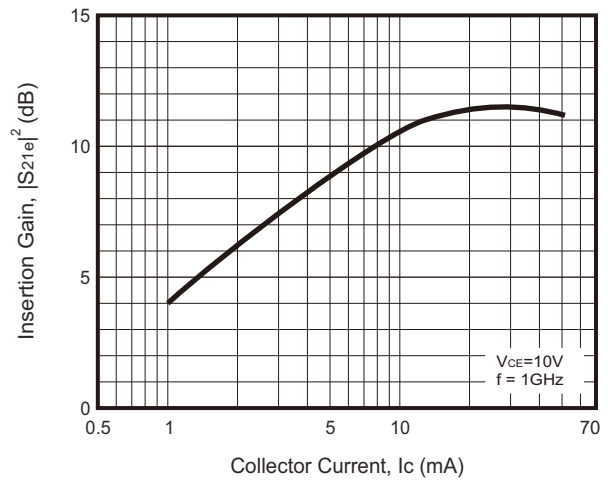


Fig.5 - Gain Bandwidth Product Vs. Collector Current

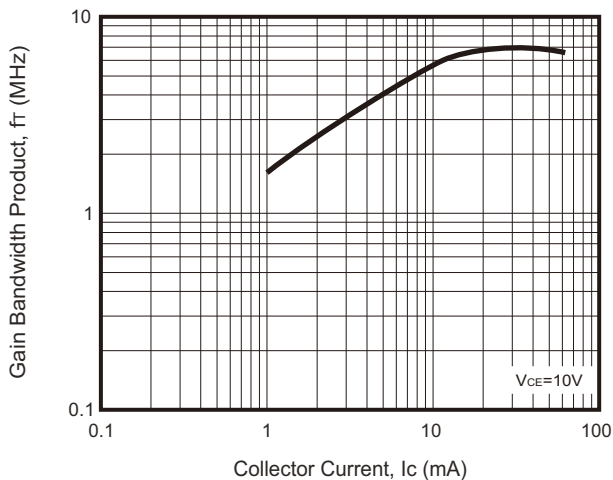
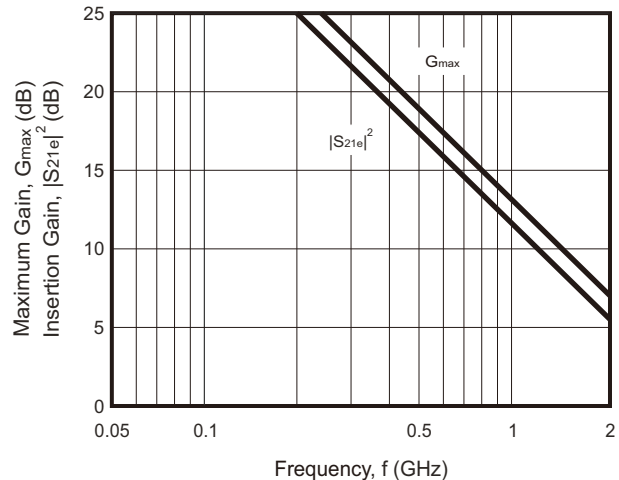
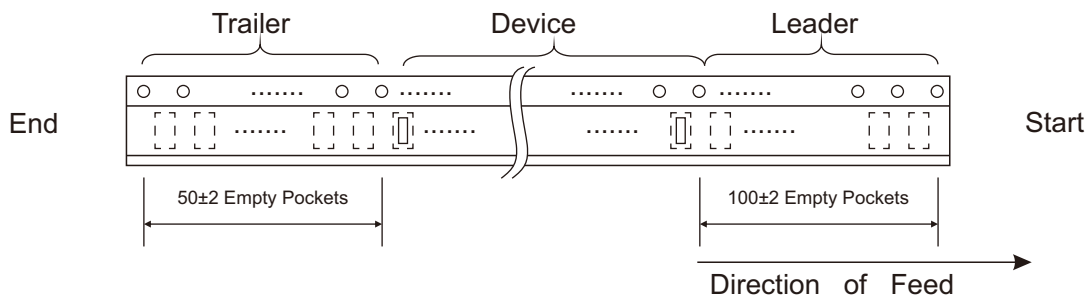
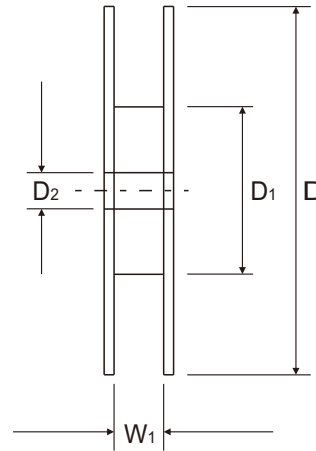
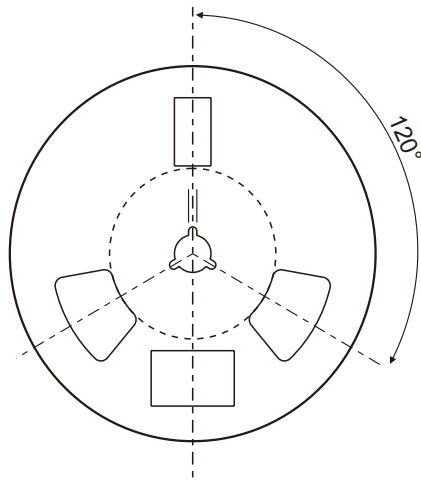
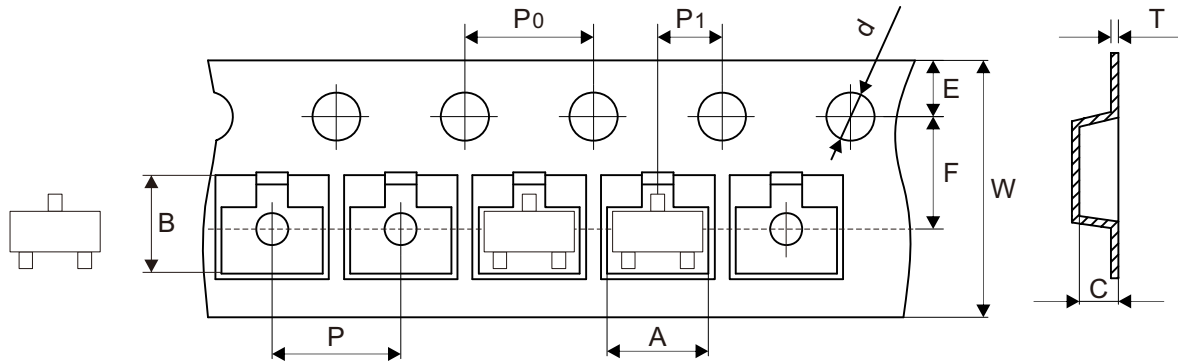


Fig.6 - Insertion Gain, Max. Gain Vs. Frequency



Reel Taping Specification

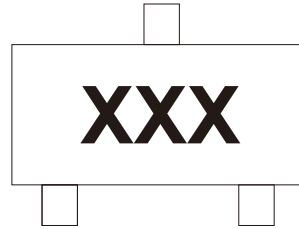


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

SOT-23	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	8.00 ± 0.30	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 ± 0.012	0.374 ± 0.039

Marking Code

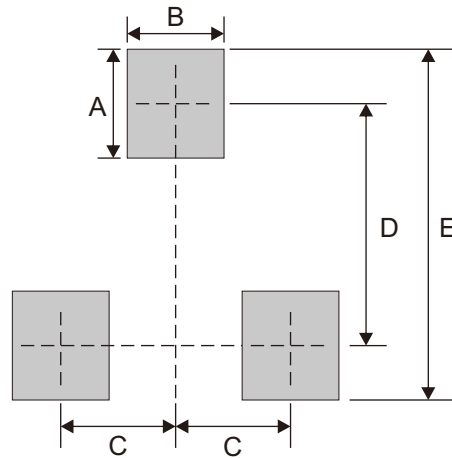
Part Number	Marking Code
2SC3356R-G	R24
2SC3356S-G	R25



XXX = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.031
C	0.95	0.037
D	2.00	0.079
E	2.90	0.114



Standard Packaging

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