



**浩畅半导体**  
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**2SC3356** TRANSISTOR (NPN)

**SOT-23 Plastic-Encapsulate Transistors**

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客户确认：

公司签章：

部门

工程部

品保部

采购部

签名

日期



**SOT-23 Plastic-Encapsulate Transistors**

**2SC3356** TRANSISTOR (NPN)

**FEATURES**

- Low noise amplifier at VHF, UHF and CATV band.
- Low Noise and High Gain
- High Power Gain



**MAXIMUM RATINGS (T<sub>A</sub>=25; unless otherwise noted)**

Symbol	Parameter	Value	Units
V <sub>CB0</sub>	Collector- Base Voltage	20	V
V <sub>CE0</sub>	Collector-Emitter Voltage	12	V
V <sub>EB0</sub>	Emitter-Base Voltage	3	V
I <sub>c</sub>	Collector Current -Continuous	0.1	A
P <sub>c</sub>	Collector Power Dissipation	0.25	W
T <sub>J</sub>	Junction Temperature	150	
T <sub>stg</sub>	Storage Temperature	-55-150	

**ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25; unless otherwise specified)**

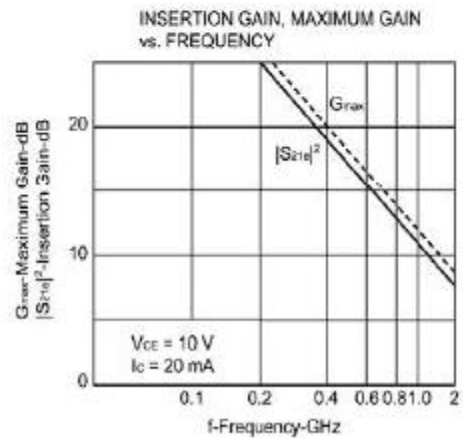
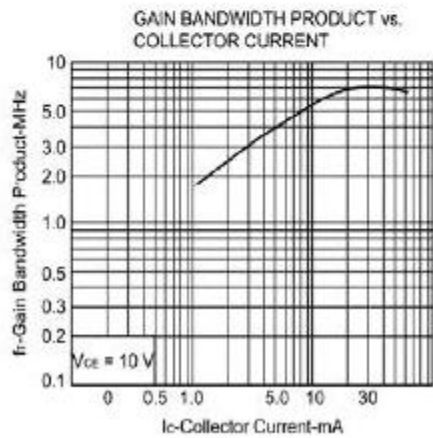
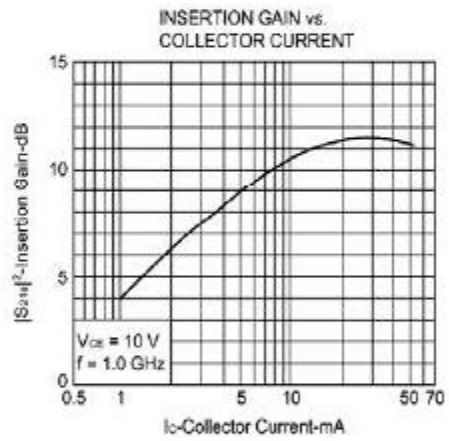
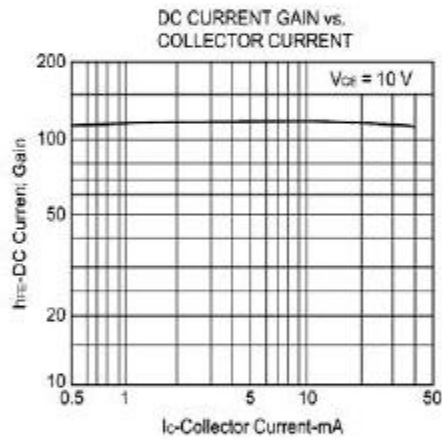
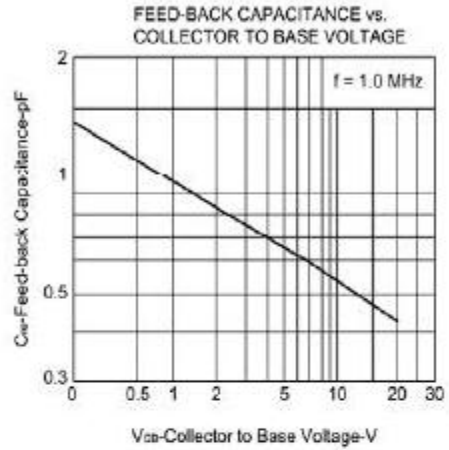
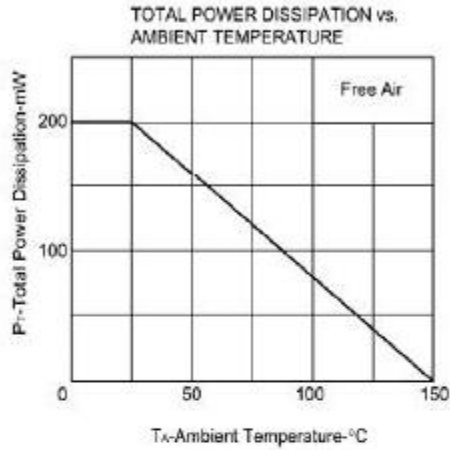
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> =10uA, I <sub>E</sub> =0	20			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> = 1mA, I <sub>B</sub> =0	12			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0			1	uA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =1V, I <sub>c</sub> =0			1	uA
DC current gain	h <sub>FE</sub> <sup>*</sup>	V <sub>CE</sub> =10V, I <sub>c</sub> = 20mA	50		250	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>c</sub> = 20mA		î		GHz
Noise figure	NF	V <sub>CE</sub> =10V, I <sub>c</sub> = 7mA, f = 1GHz			2	dB

**CLASSIFICATION OF hFE**

Marking	R23	R24	R25
Rank	Q	R	S
Range	50-100	80-160	125-250

# Typical Characteristics

2SC3356



## SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°

## SOT-23 Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.