

SOT-23 Plastic-Encapsulate Transistors

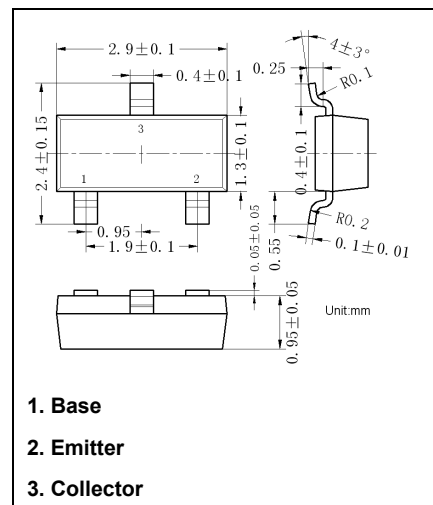
2SC3356

NPN Transistors

Features

- Low Noise and High Gain
- High Power Gain

Marking: R25



Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector Base Voltage	20	V
V _{CEO}	Collector Emitter Voltage	12	V
V _{EBO}	Emitter Base Voltage	3	V
I _c	Collector Current	100	mA
P _D	Power Dissipation	200	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65 ~ +150	°C

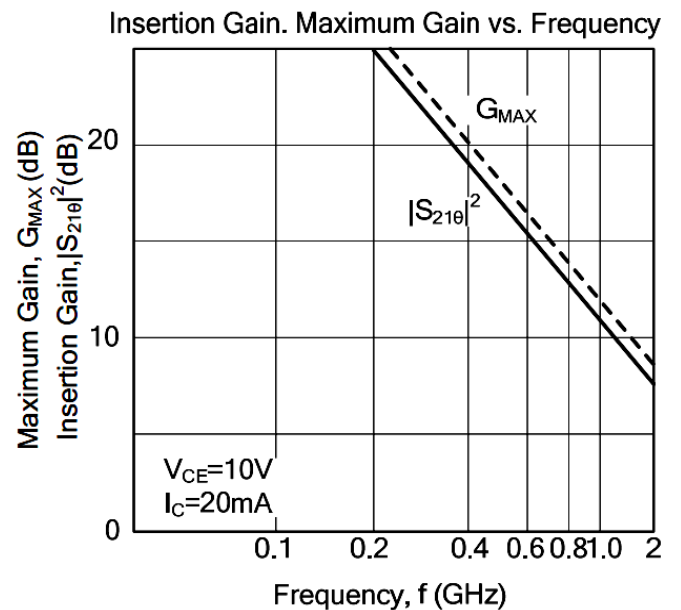
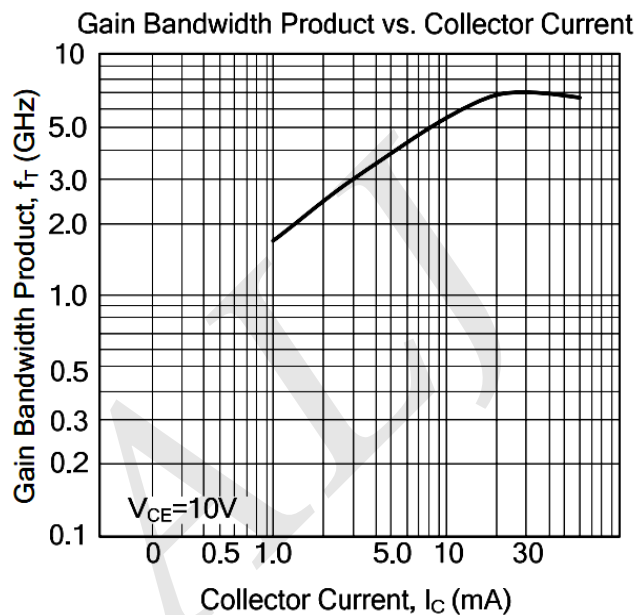
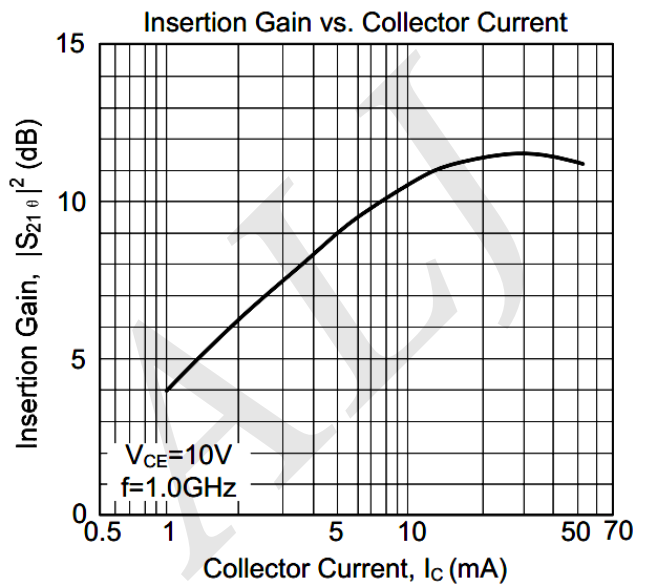
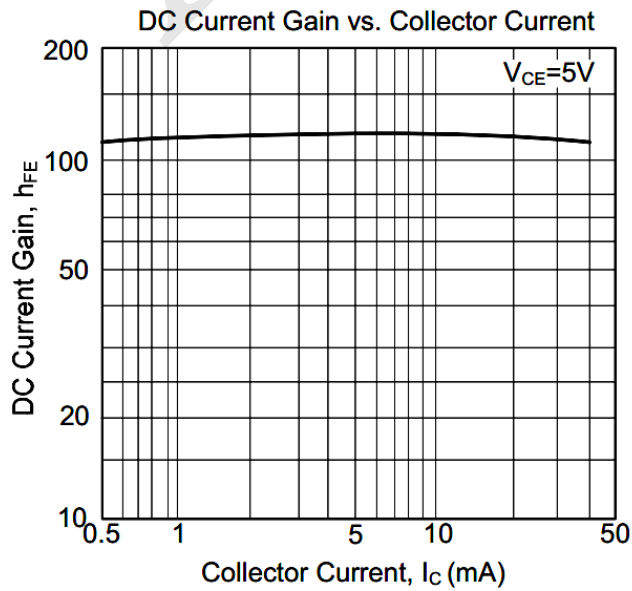
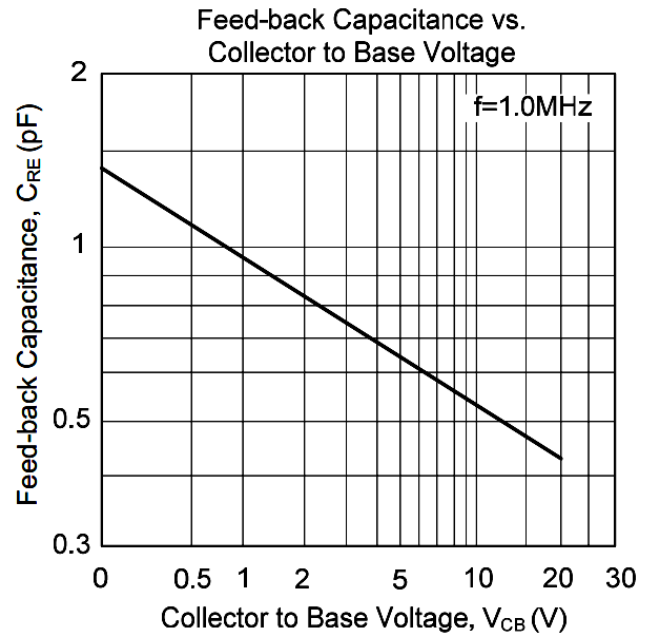
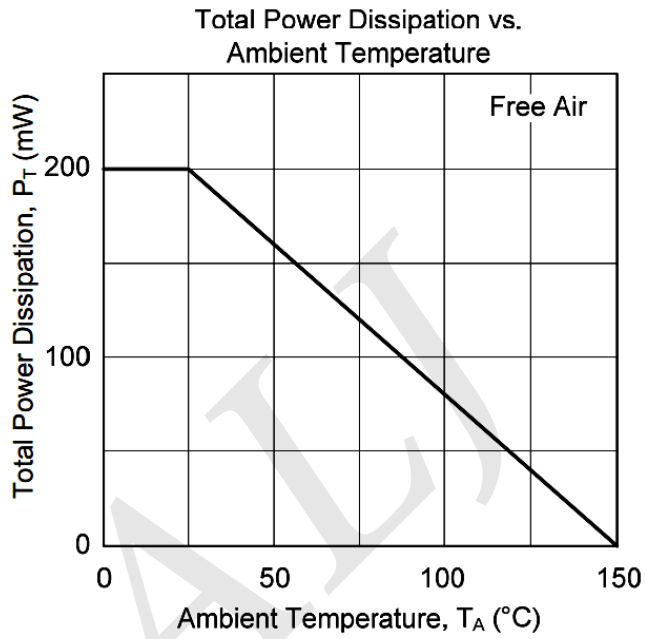
Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _c = 10μA, I _E = 0	20			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _c = 1mA, R _{BE} = ∞	12			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E = 10μA, I _c = 0	3			V
I _{CBO}	Collector cut-off current	V _{CB} = 20V, I _E = 0			100	nA
I _{EBO}	Emitter cut-off current	V _{EB} = 3V, I _c = 0			100	nA
h _{FE(1)}	DC current gain	V _{CE} = 5V, I _c = 1mA	80		300	
h _{FE(2)}		V _{CE} = 10V, I _c = 20mA	50			
V _{CE(sat)}	Collector-emitter saturation voltage	I _c = 50mA, I _B = 5mA			0.2	V
f _T	Transition frequency	V _{CE} = 10V, I _c = 20mA		7		GHz
C _{RE}	Feed-Back Capacitance	V _{CB} = 10V, I _E = 0, f = 1.0MHz			1.0	pF
NF	Noise Figure	V _{CE} = 10V, I _c = 7mA, f = 1.0GHz			2.0	dB

Classification OF h_{FE(1)}

Rank	A	B	C
Range	80-100	100-200	100-300

Typical Characteristics



Typical Characteristics (Cont.)

