



Silicon Epitaxial Planar Transistor

2SC5554

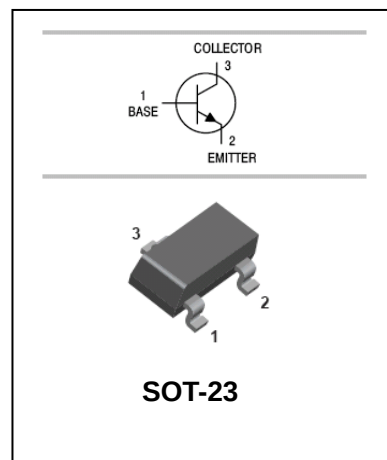
FEATURES

- Capable low voltage operation



APPLICATIONS

- Designed for low noise amplifier at VHF
UHF and CATV band



ORDERING INFORMATION

Type No.	Marking	Package Code
2SC5554	YH	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	15	V
V_{CEO}	Collector-Emitter Voltage	9	V
V_{EBO}	Emitter-Base Voltage	1.5	V
I_C	Collector Current -Continuous	20	mA
P_C	Collector Dissipation	80	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C



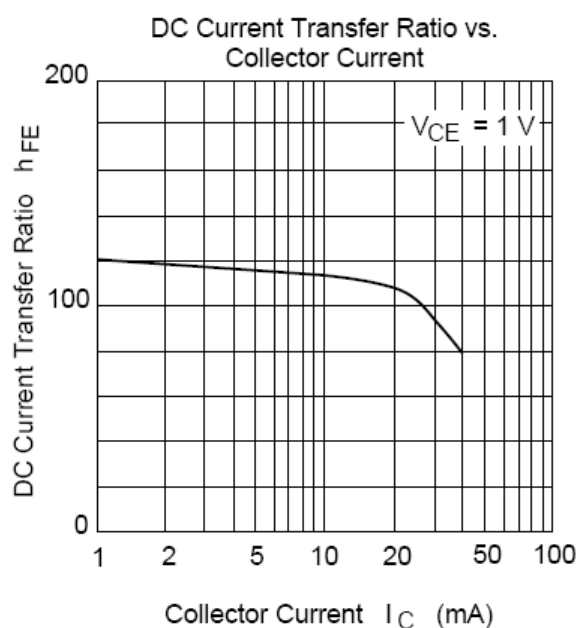
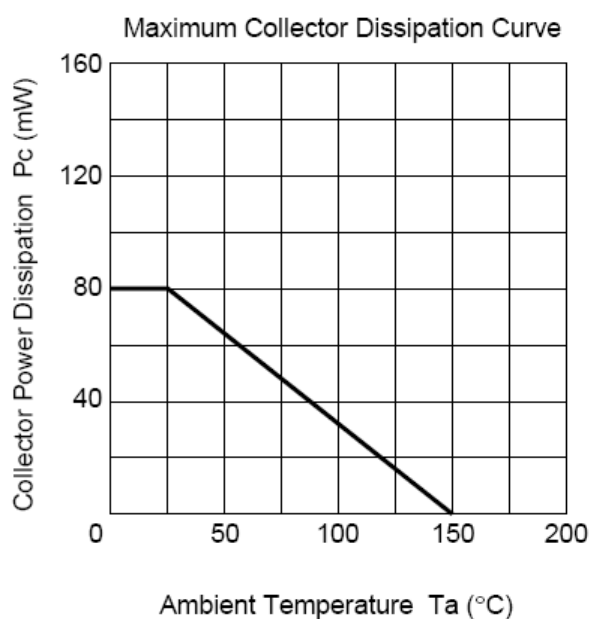
Silicon Epitaxial Planar Transistor

2SC5554

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

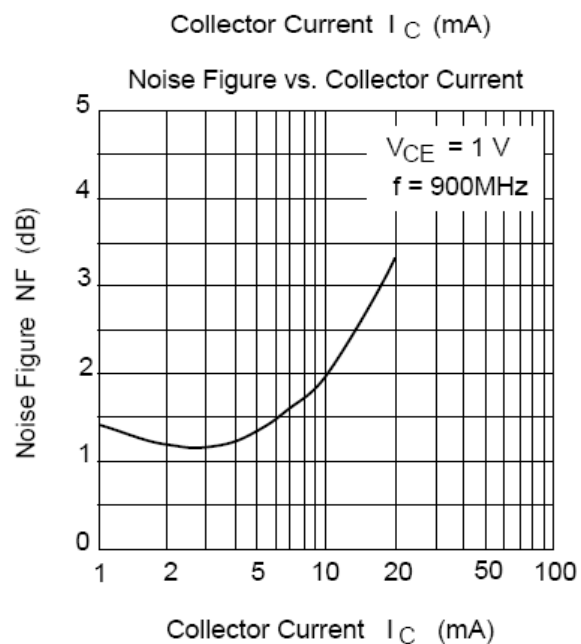
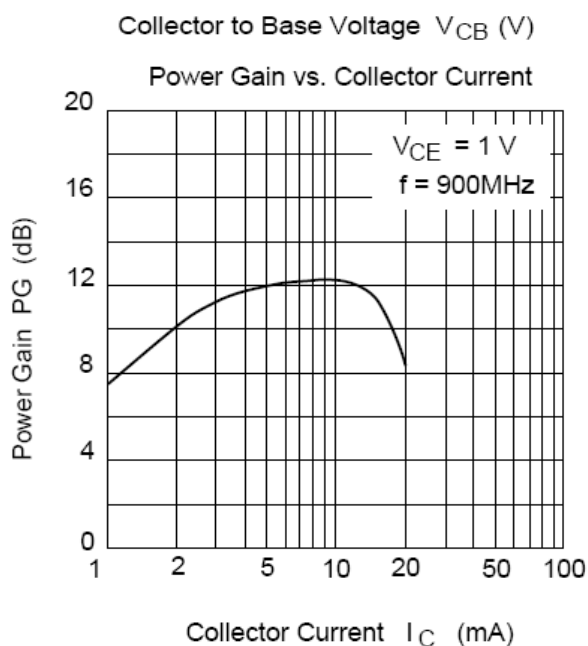
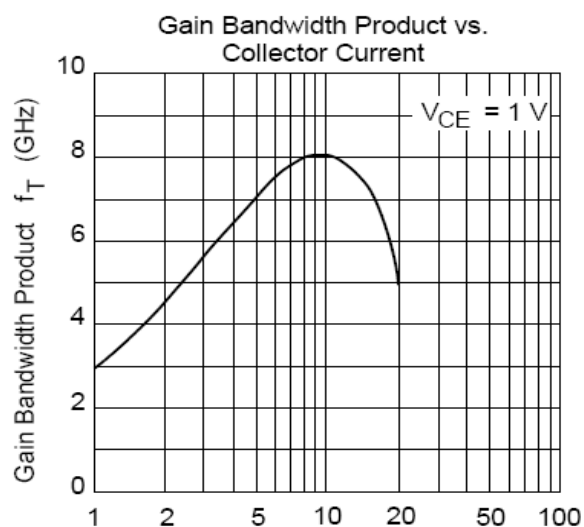
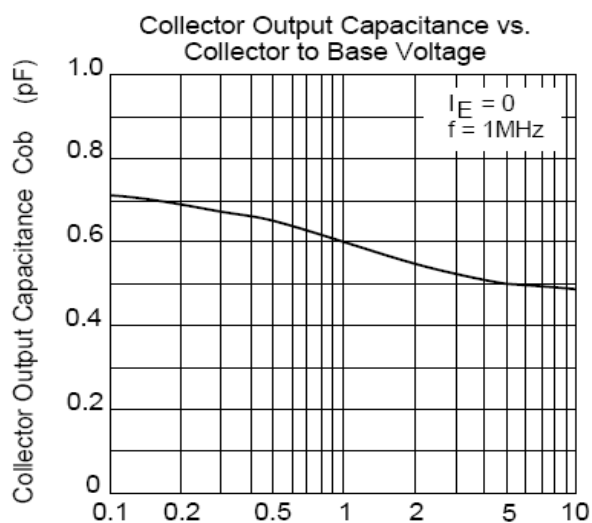
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	9			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	1.5			V
Collector cut-off current	I_{CBO}	$V_{CB}=15V, I_E=0$			10	μA
Collector cut-off current	I_{CEO}	$V_{CB}=9V, R_{BE}=\infty$			1	mA
Emitter cut-off current	I_{EBO}	$V_{EB}=1.5V, I_C=0$			10	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=5mA$	50	120	250	
Transition frequency	f_T	$V_{CE}=1V, I_C=5mA$	3.5	7		GHz
Collector output capacitance	C_{ob}	$V_{CB}=1V, I_E=0, f=1MHz$		0.6	0.9	pF
Power gain	PG	$V_{CE}=1V, I_C=5mA, f=900MHz$	9	12		dB
Noise Figure	NF	$V_{CE}=1V, I_C=5mA, f=900MHz$		1.4	3	dB

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



Silicon Epitaxial Planar Transistor

2SC5554



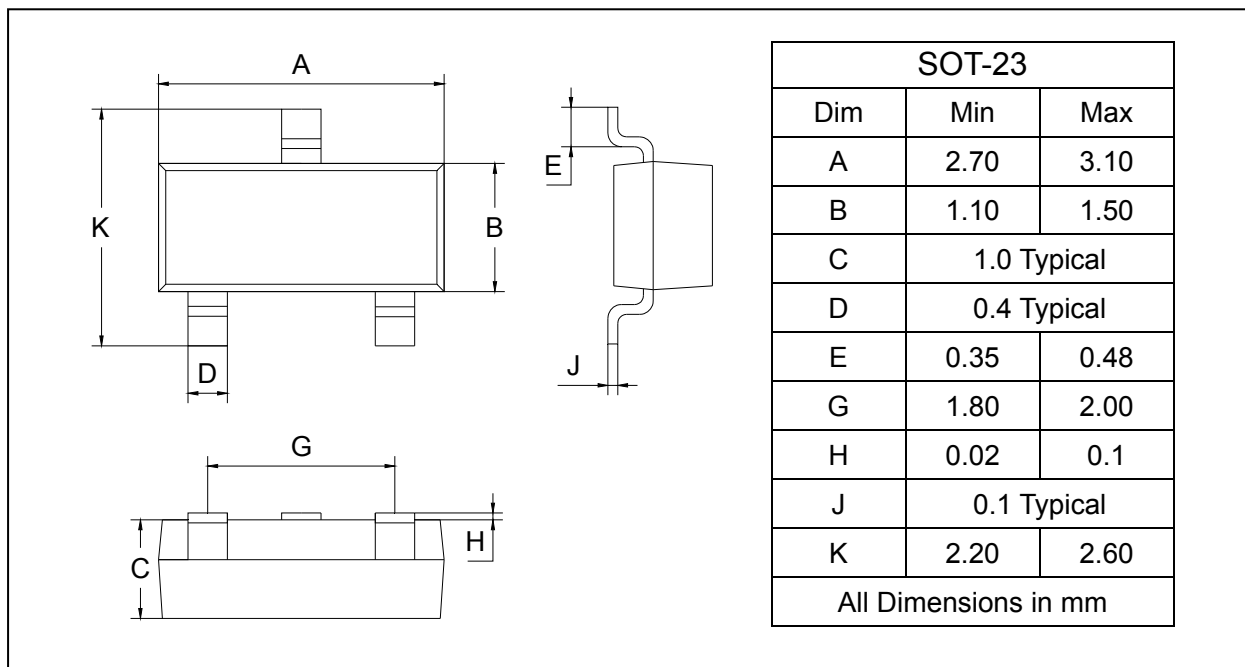
Silicon Epitaxial Planar Transistor

2SC5554

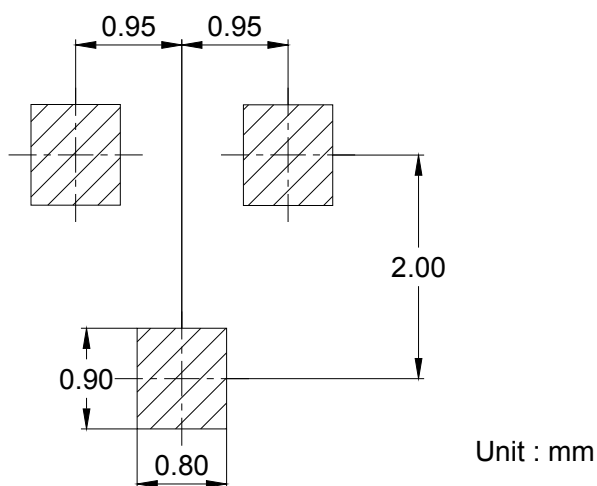
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SC5554	SOT-23	3000/Tape&Reel