
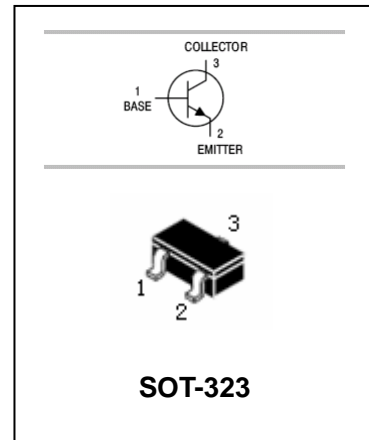


Silicon Epitaxial Planar Transistor

2SC3356W

FEATURES

- Low noise and high gain: $NF=1.1\text{dB TYP}$,
 $G_a=11\text{dB TYP}$. @ $V_{CE}=10\text{V}$, $I_C=7\text{mA}$, $f=1.0\text{GHz}$  Lead-free
- High power gain: $MAG=13\text{dB TYP}$.
@ $V_{CE}=10\text{V}$, $I_C=20\text{mA}$, $f=1.0\text{GHz}$



APPLICATIONS

- NPN Silicon Epitaxial Planar Transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC3356W	R23/R24/R25	SOT-323

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current -Continuous	100	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

Silicon Epitaxial Planar Transistor**2SC3356W****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	3			V
Collector cut-off current	I_{CBO}	$V_{CB}=10V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=1V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=20mA$	50		300	
Transition frequency	f_T	$V_{CE}=10V, I_C=20mA$		6		GHz
Noise figure	F	$V_{CE}=10V, I_C=7mA, f=1GHz$			2	dB

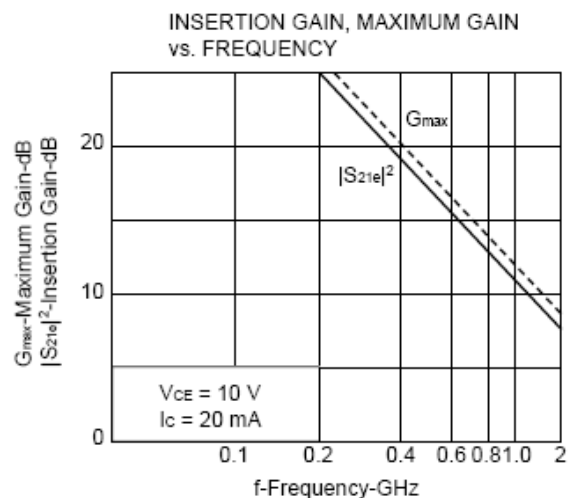
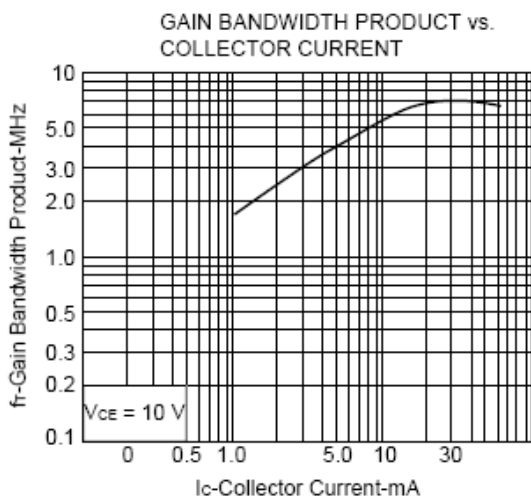
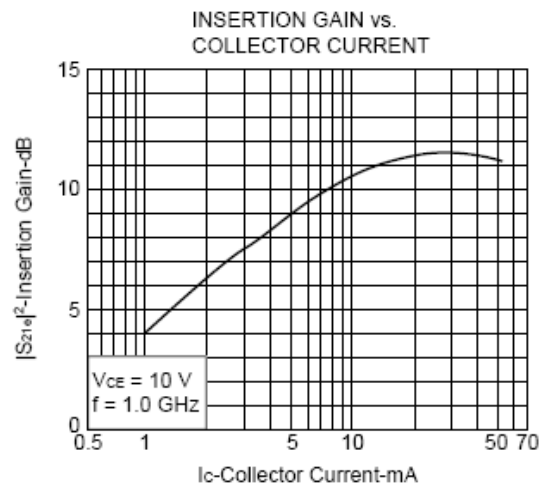
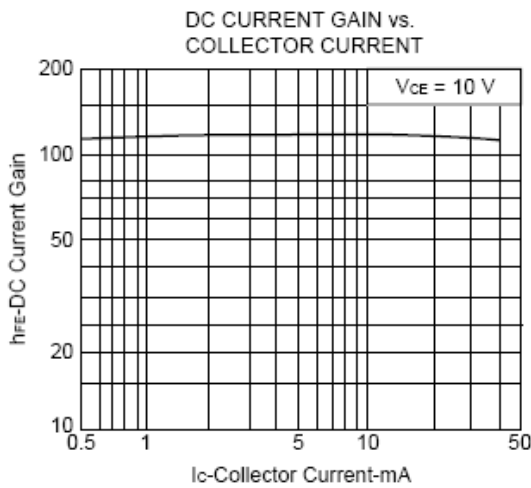
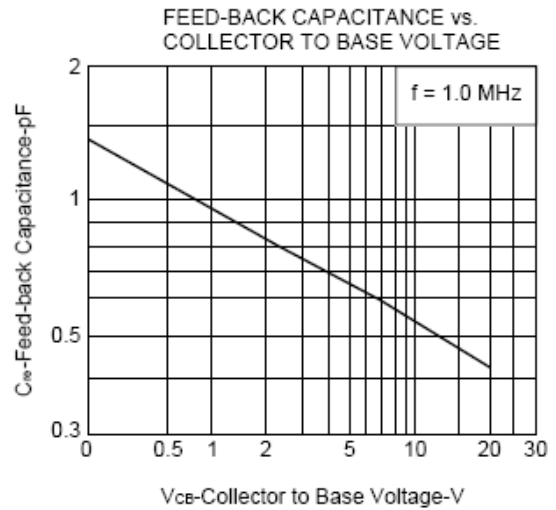
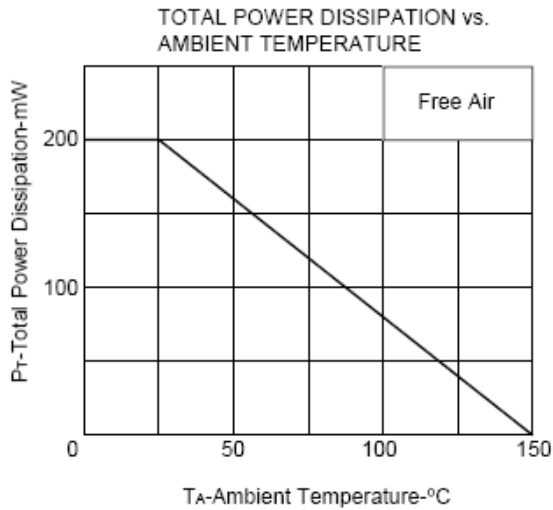
CLASSIFICATION OF $h_{FE(1)}$

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

Silicon Epitaxial Planar Transistor

2SC3356W

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



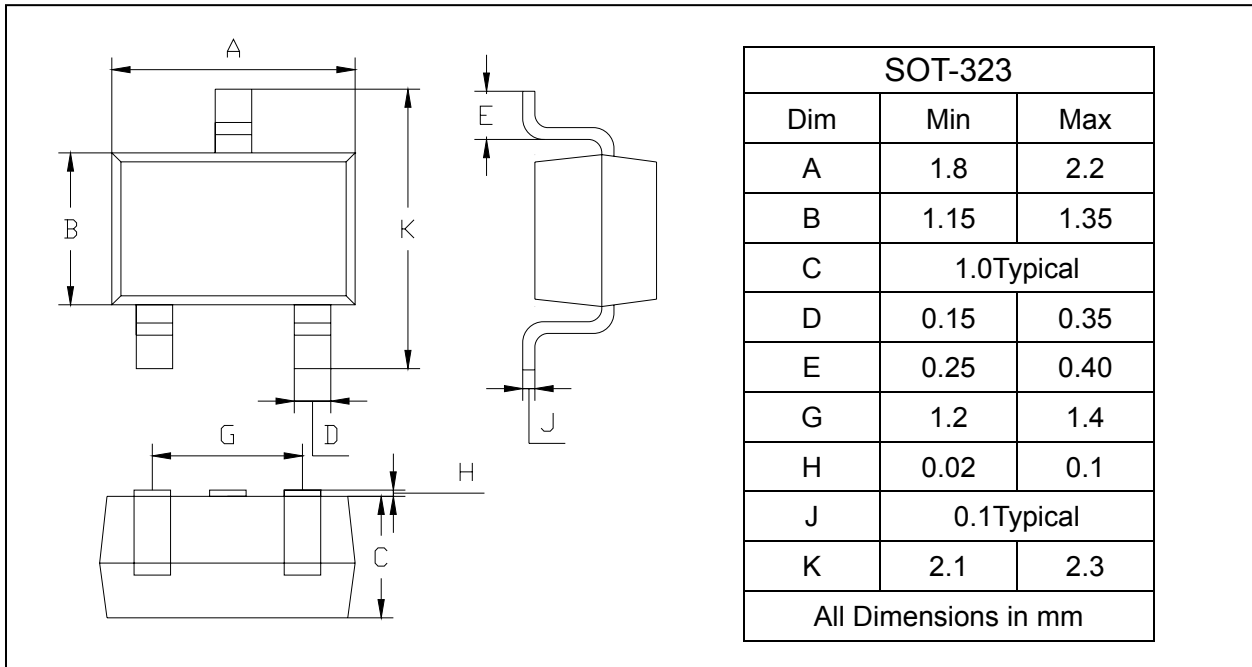
Silicon Epitaxial Planar Transistor

2SC3356W

PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



PACKAGE INFORMATION

Device	Package	Shipping
2SC3356W	SOT-323	3000/Tape&Reel