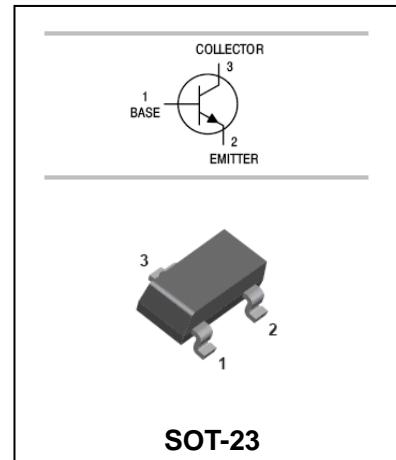


## Silicon Epitaxial Planar Transistor

## 2SC5343

### FEATURES

- Excellent  $h_{FE}$  linearity  
 $:h_{FE(2)}=100(\text{Typ})$  at  $V_{CE}=6V, I_C=150\text{mA}$   
 $:h_{FE}(I_C=0.1\text{mA})/h_{FE}(I_C=2\text{mA})=0.95(\text{Typ})$ .
- Low noise:  $NF=1\text{Db}(\text{Typ})$ . at  $f=1\text{KHz}$ .
- Complementary pair with 2SA1980S.



### APPLICATIONS

- General small signal amplifier.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SC5343	5343	SOT-23

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	150	mA
$I_B$	Base Current-Continuous	50	mA
$P_C$	Collector Dissipation	200	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

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

## Silicon Epitaxial Planar Transistor

## 2SC5343

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=2mA$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.1	0.25	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=1mA$	80			MHz
Output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1kHz$			3.5	pF
Noise Figure	NF	$V_{CE}=6V, I_C=0.1mA, f=1kHz$			10	dB

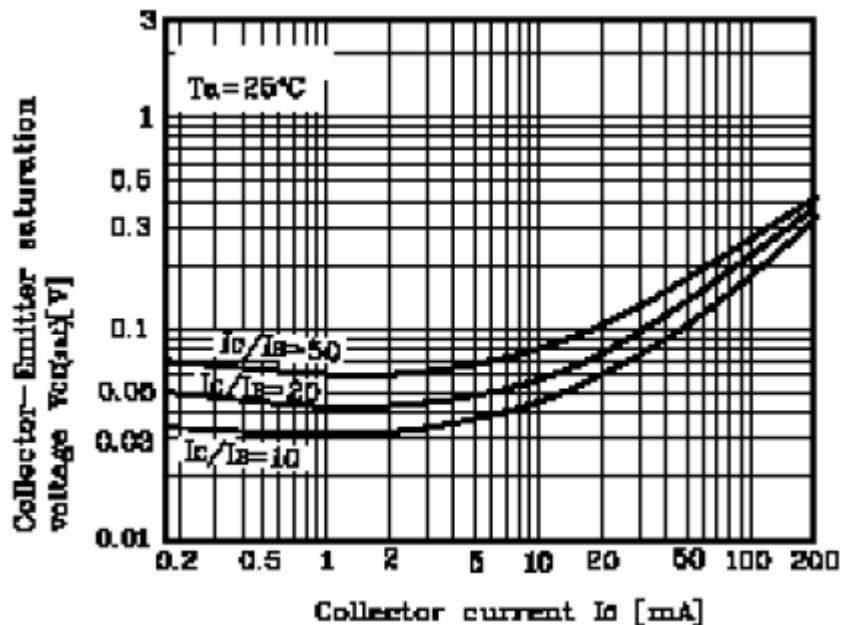
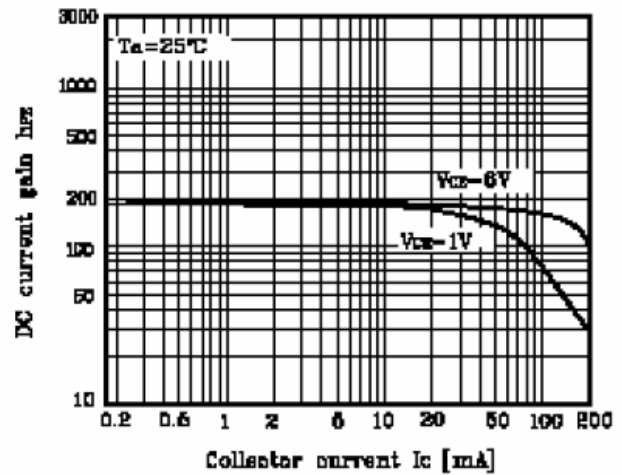
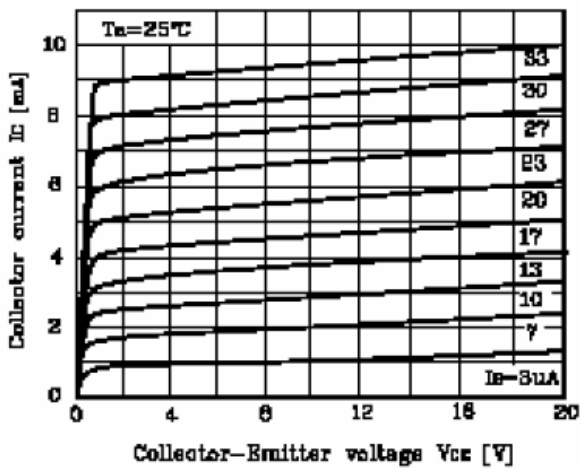
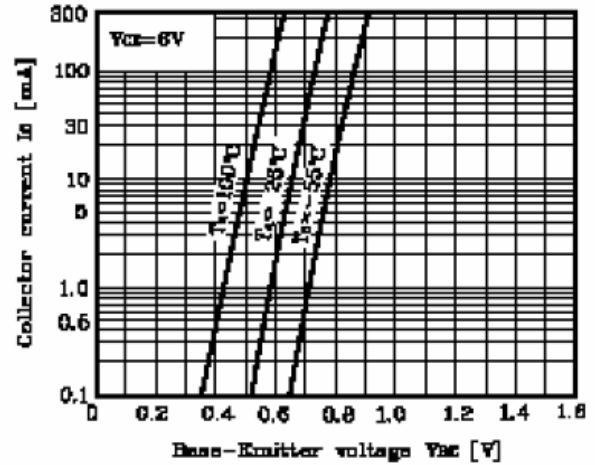
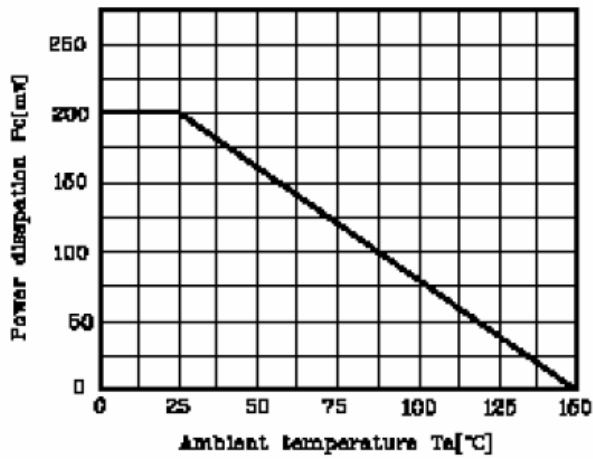
### CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	G	L
Range	70-140	120-240	200-400	300-700

## Silicon Epitaxial Planar Transistor

## 2SC5343

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



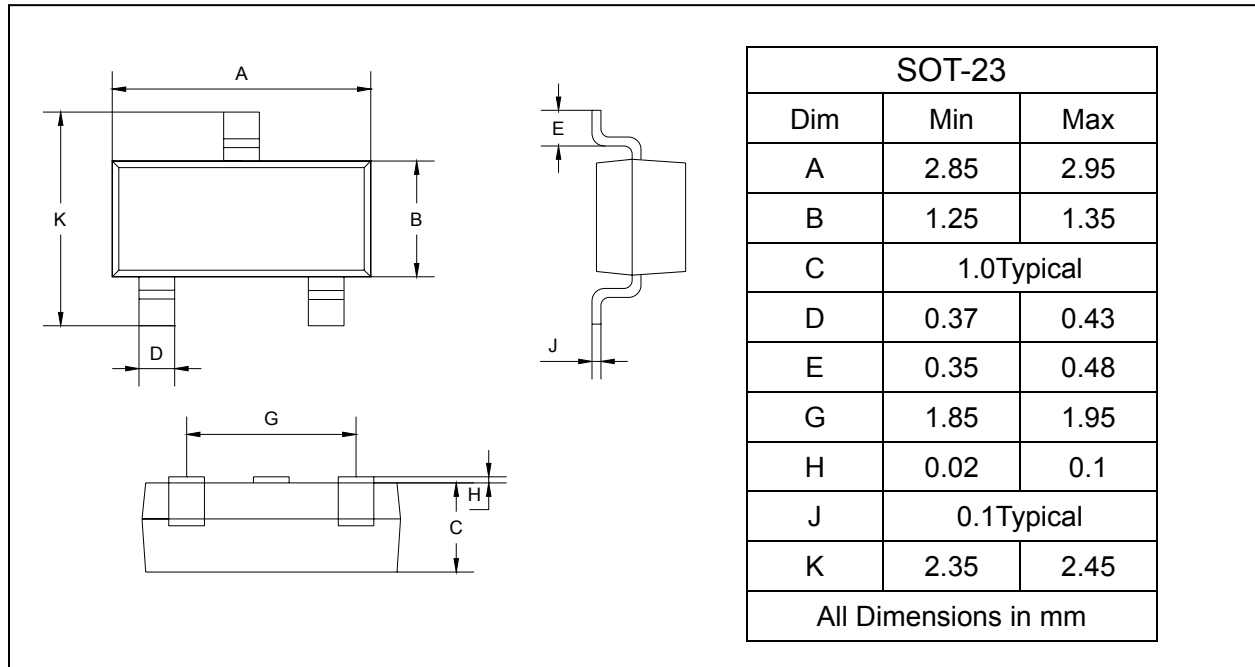
## Silicon Epitaxial Planar Transistor

## 2SC5343

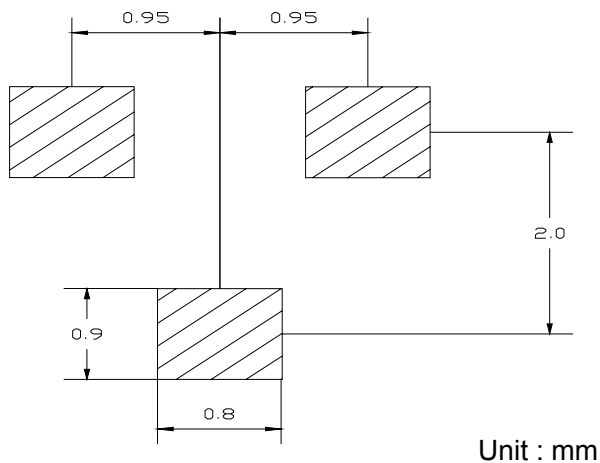
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SC5343	SOT-23	3000/Tape&Reel