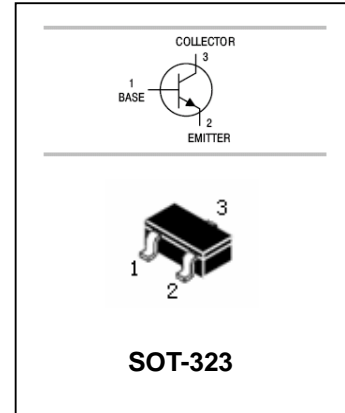


## Silicon Epitaxial Planar Transistor

## 2SC4180W

### FEATURES

- Excellent  $h_{FE}$  linearity.
- High voltage and current.
- Power dissipation  $P_C=150mW$ .
- Small package.



### APPLICATIONS

- Audio frequency general purpose amplifier.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4180W	D15/D16/D17/D18	SOT-323

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	120	V
$V_{CEO}$	Collector-Emitter Voltage	120	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	50	mA
$P_C$	Collector Dissipation	150	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^{\circ}C$

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

## Silicon Epitaxial Planar Transistor

## 2SC4180W

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=120V, I_E=0$			0.05	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.05	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$ $V_{CE}=6V, I_C=1mA$	135 100		900	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.3	V
Transition frequency	$f_T$	$V_{CE}=6V, I_E=1mA$		250		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=30V, I_E=0, f=1MHz$			2.5	pF

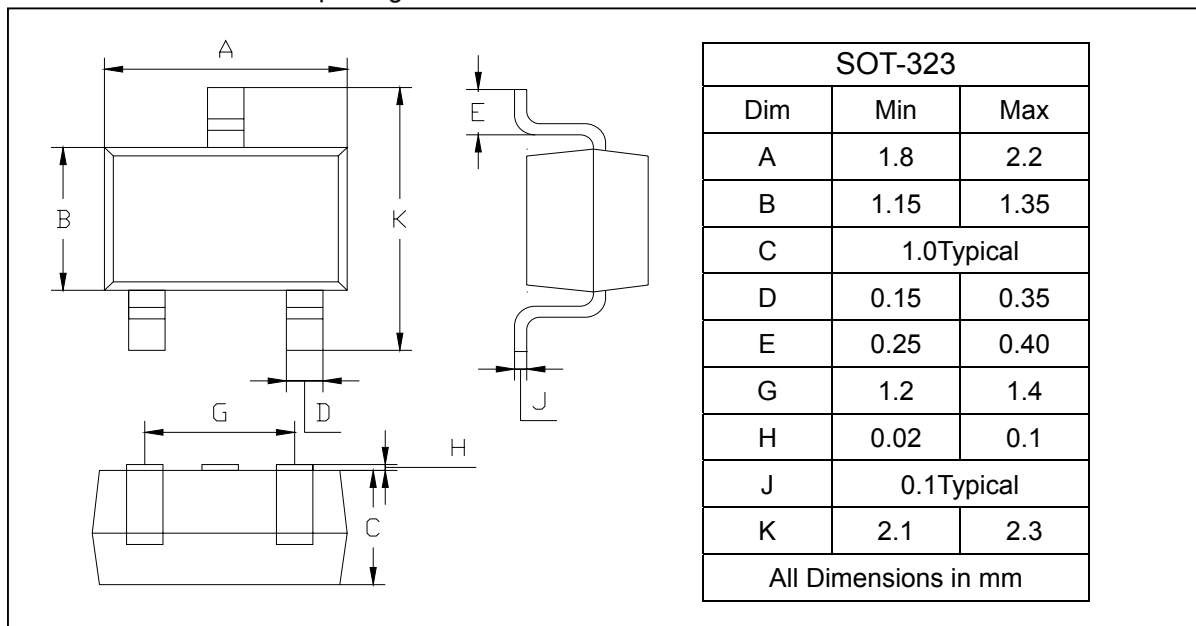
### CLASSIFICATION OF $h_{FE}$

Range	135-270	200-400	300-600	450-900
Marking	D15	D16	D17	D18

### PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



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**Silicon Epitaxial Planar Transistor**

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**2SC4180W**

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## PACKAGE INFORMATION

Device	Package	Shipping
2SC4180W	SOT-323	3000/Tape&Reel