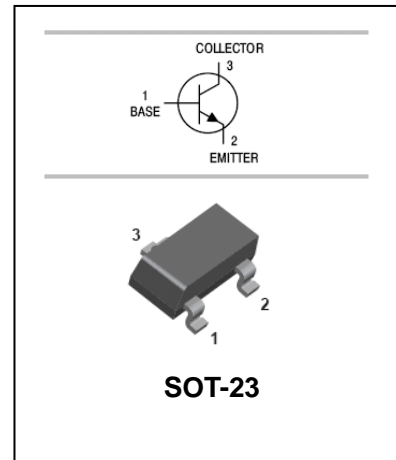


## Silicon Epitaxial Planar Transistor

## 2SC2714

### FEATURES

- Small reverse transfer capacitance:  
C<sub>re</sub>=0.7pF(Typ.)
- Low noise Figure:NF=2.5dB(Typ.)  
f=100MHz



### APPLICATIONS

- High frequency amplifier applications
- FM,RF,MIX,IF Amplifier applications

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SC2714	QR/QO/QY	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	4	V
I <sub>C</sub>	Collector Current -Continuous	20	mA
I <sub>B</sub>	Base current	4	mA
P <sub>C</sub>	Collector Dissipation	100	mW
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-55 to+125	°C

Silicon Epitaxial Planar Transistor

**2SC2714**

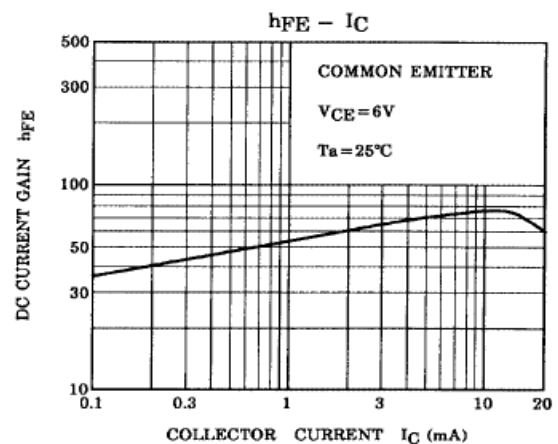
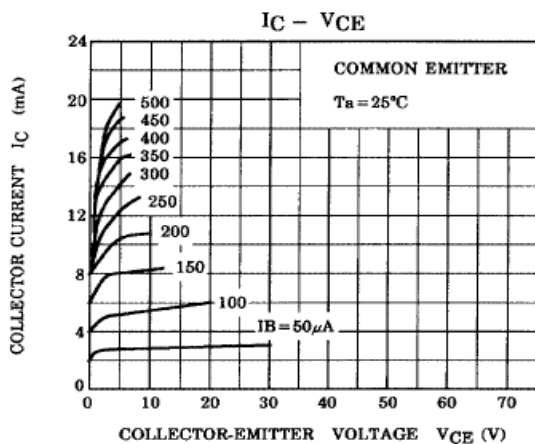
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=18V, I_E=0$			0.5	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			0.5	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$	40		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.3	V
Transition frequency	$f_T$	$V_{CE}=6V, I_C=1mA$		550		MHz
Output capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1MHz$		0.7		pF
Noise Figure	NF	$V_{CE}=6V, I_E=-1mA, f=100MHz$		2.5	5	dB

CLASSIFICATION OF  $h_{FE(1)}$

Rank	R	O	Y
Range	40-80	70-140	100-200
Marking	QR	QO	QY

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



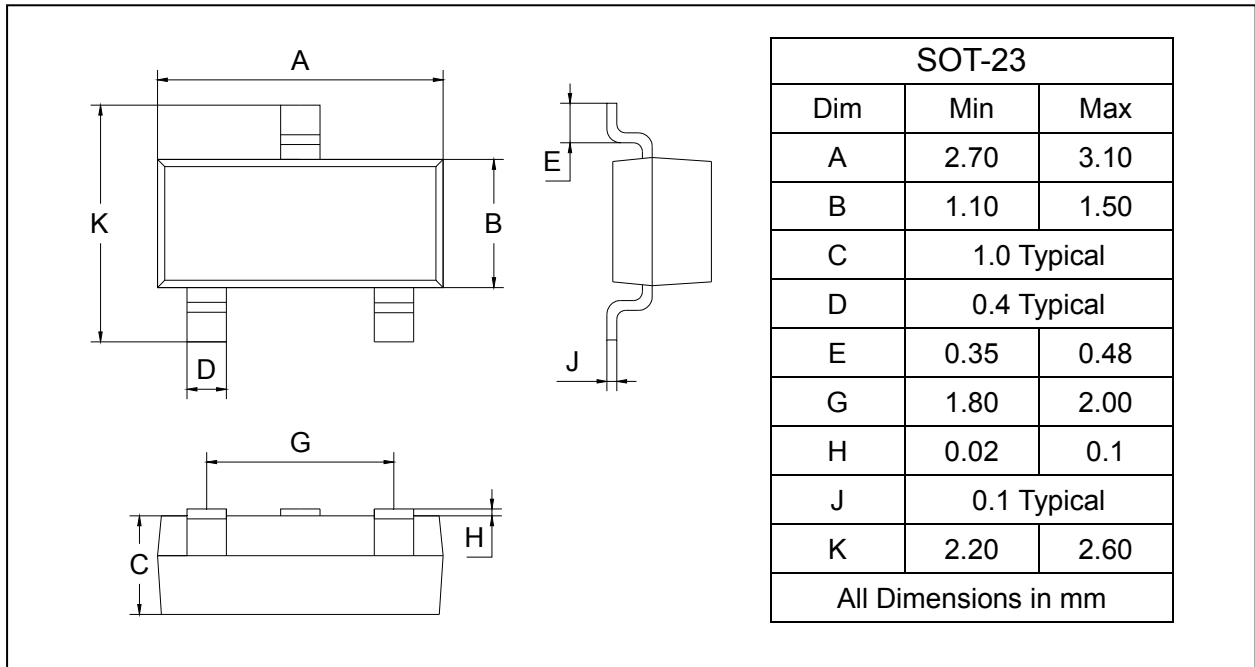
## Silicon Epitaxial Planar Transistor

## 2SC2714

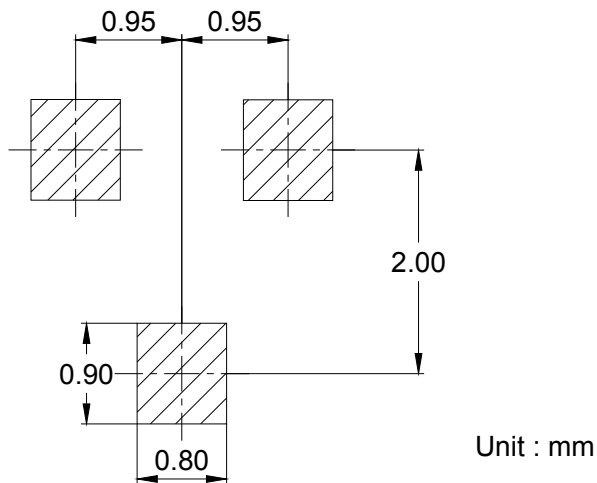
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SC2714	SOT-23	3000/Tape&Reel