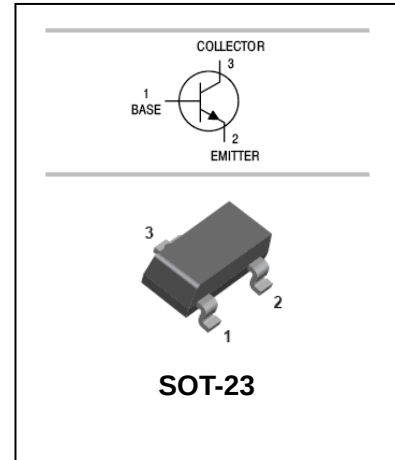


Silicon Epitaxial Planar Transistor

2SC2714

FEATURES

- Small reverse transfer capacitance:
C_{re}=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 _{CBO}	Collector-Base Voltage	40	V
V _{CEO}	Collector-Emitter Voltage	30	V
V _{EBO}	Emitter-Base Voltage	4	V
I _C	Collector Current -Continuous	20	mA
P _C	Collector Dissipation	100	mW
T _j , T _{stg}	Junction and Storage Temperature	-55~125	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Silicon Epitaxial Planar Transistor

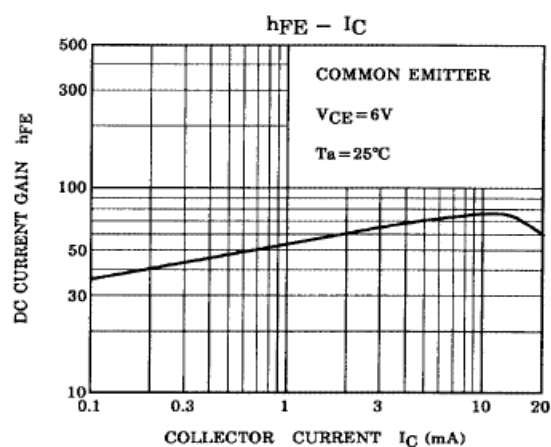
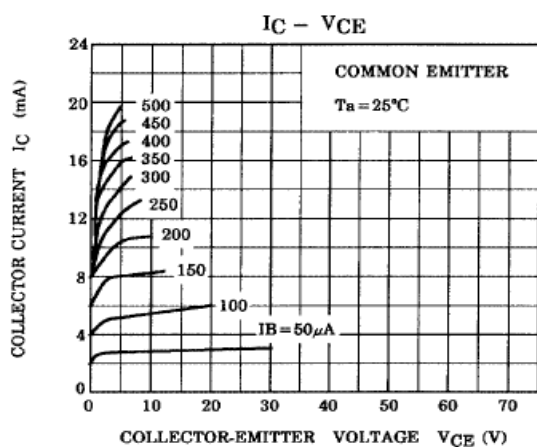
2SC2714

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	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.5	μA
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 @ $T_a=25^\circ C$ unless otherwise specified



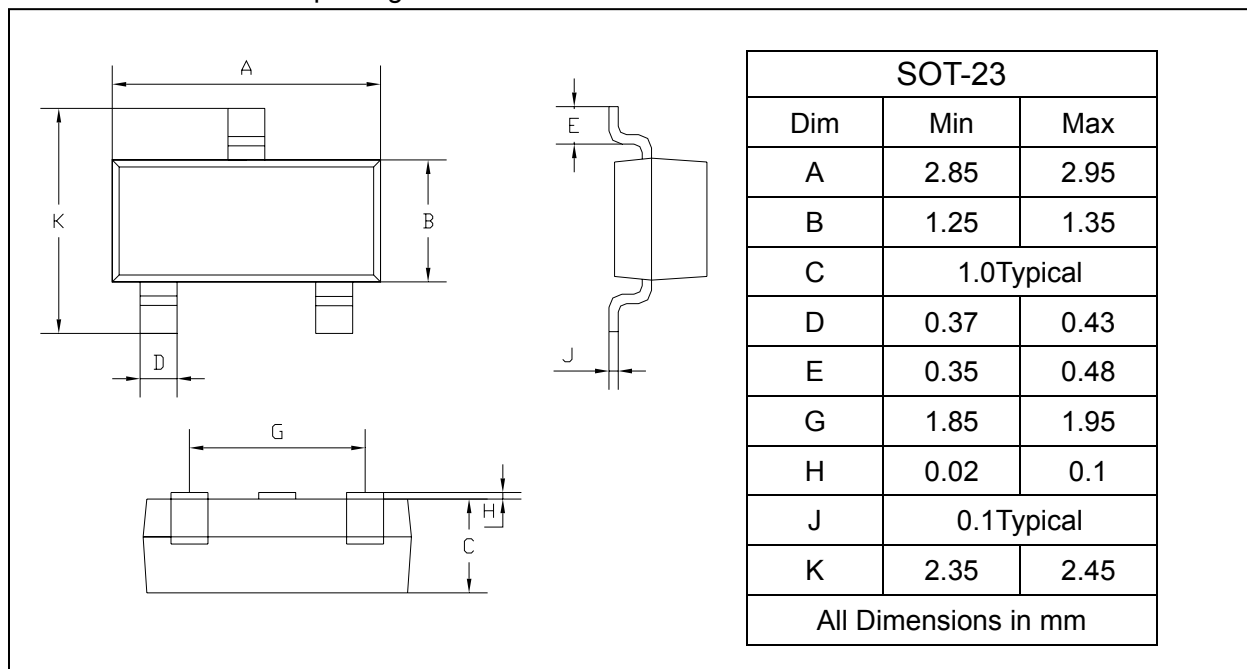
Silicon Epitaxial Planar Transistor

2SC2714

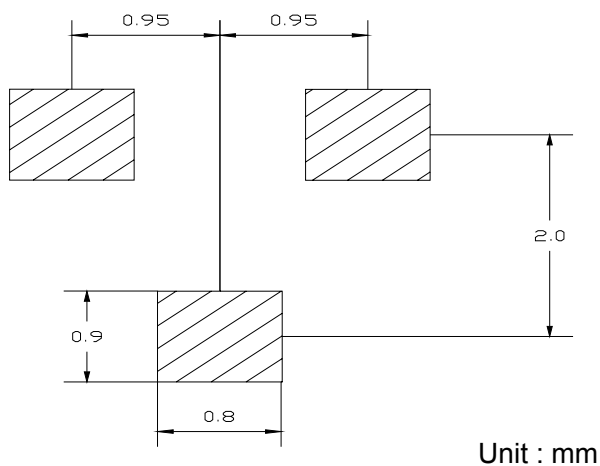
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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