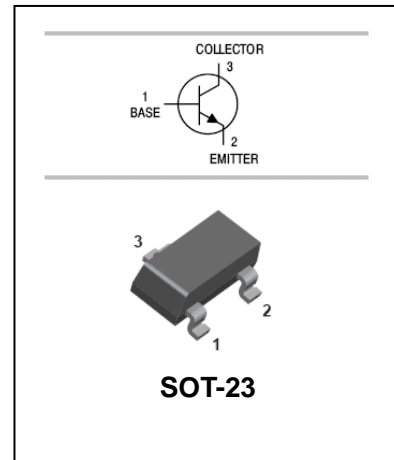


## Silicon Epitaxial Planar Transistor

## 2SC3052

### FEATURES

- Low collector to emitter saturation voltage.
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting.



### APPLICATIONS

- For hybrid IC, small type machine low frequency voltage amplify application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SC3052	LE/LF/LG	SOT-23

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

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	50	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current -Continuous	200	mA
P <sub>C</sub>	Collector Dissipation	125	mW
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-55 to +150	°C

**Silicon Epitaxial Planar Transistor**

**2SC3052**

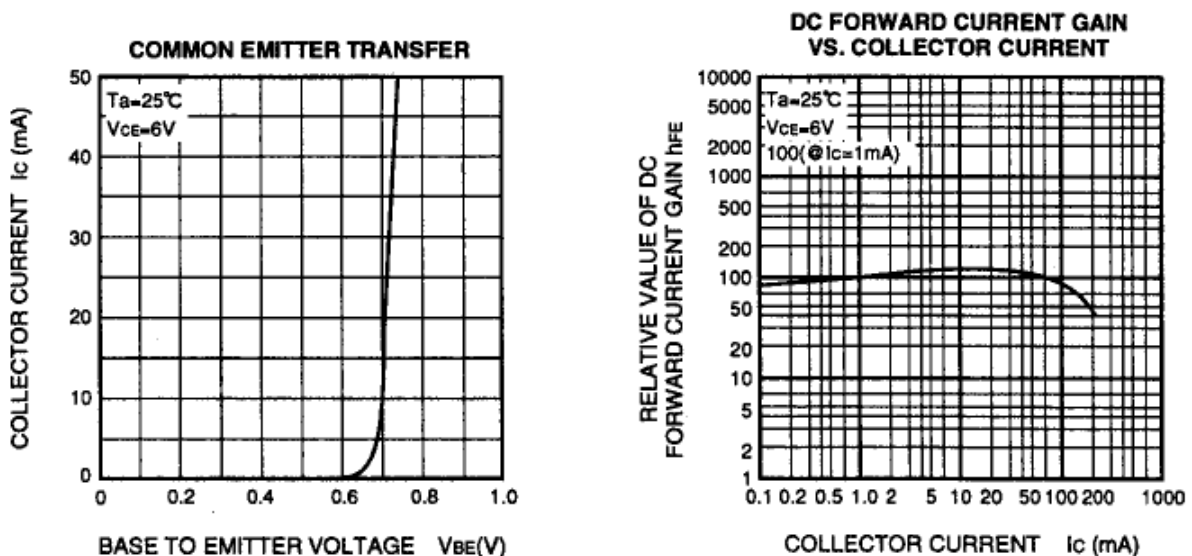
**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.1mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=50V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$	150		800	
		$V_{CE}=6V, I_C=0.1mA$	90			
Collector to Emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$			0.3	V
Collector output capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1MHz$		2.5		pF
Transition frequency	$f_T$	$V_{CE}=6V, I_C=10mA$		200		MHz
Noise Figure	NF	$V_{CE}=6V, I_E=0.1mA, f=1kHz, R_G=2k\Omega$			20	dB

**CLASSIFICATION OF  $h_{FE}$**

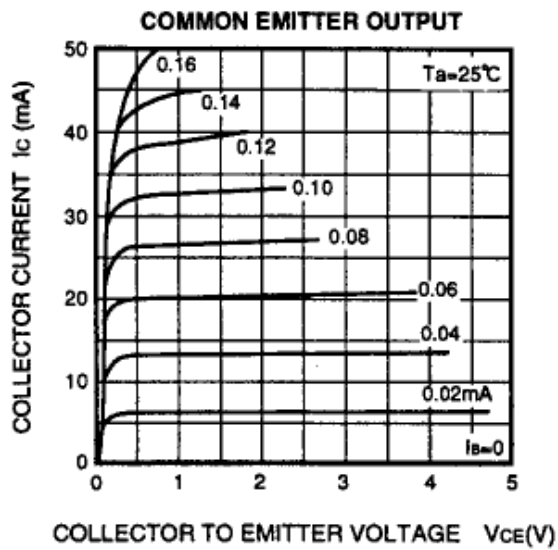
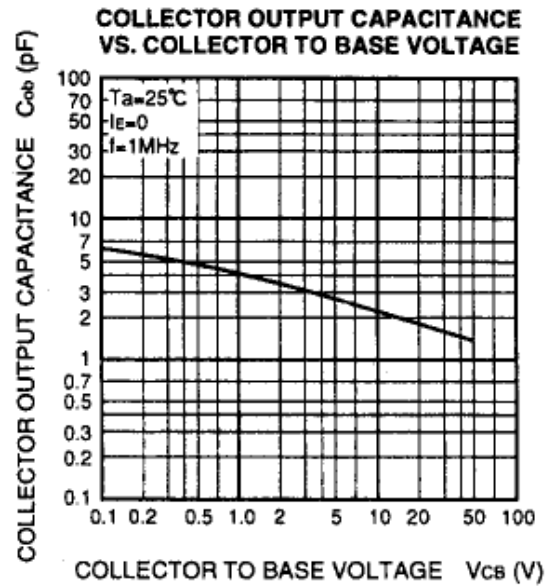
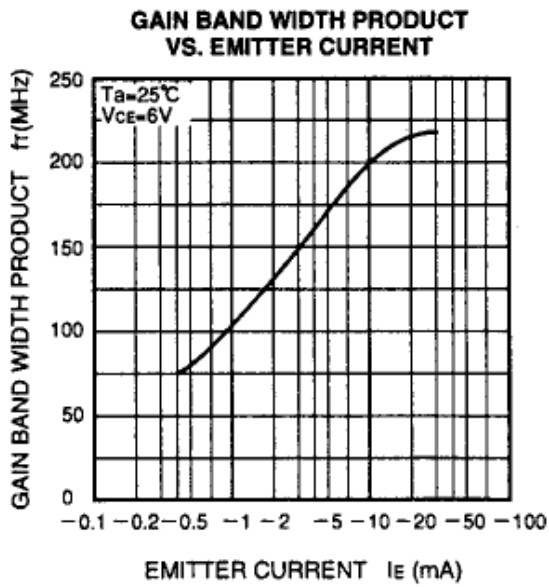
Rank	E	F	G
Range	150-300	250-500	400-800
Marking	LE	LF	LG

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**



Silicon Epitaxial Planar Transistor

**2SC3052**



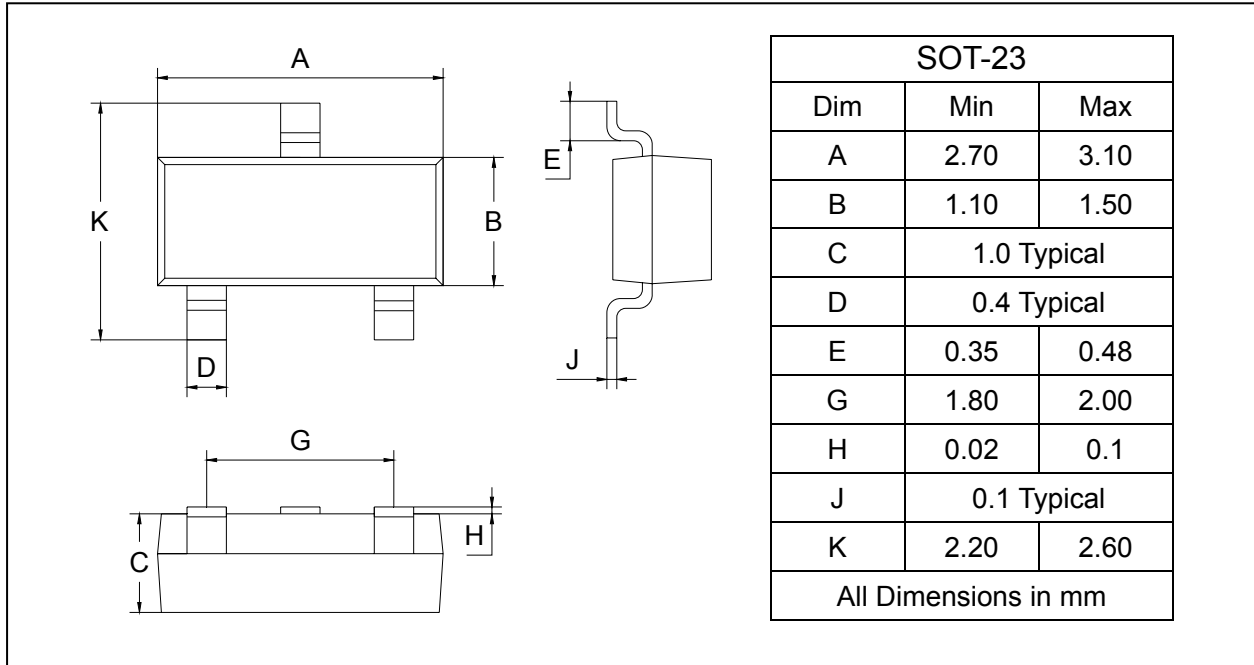
# Silicon Epitaxial Planar Transistor

# 2SC3052

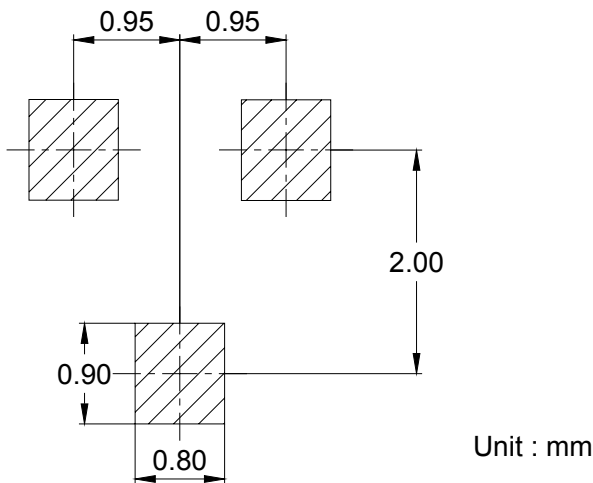
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
2SC3052	SOT-23	3000/Tape&Reel