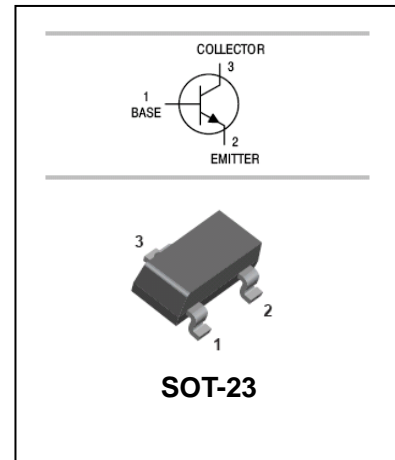


Silicon Epitaxial Planar Transistor

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 _{CBO}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	200	mA
P _C	Collector Dissipation	125	mW
T _j , T _{stg}	Junction and Storage Temperature	-55 to +150	°C



Silicon Epitaxial Planar Transistor

2SC3052

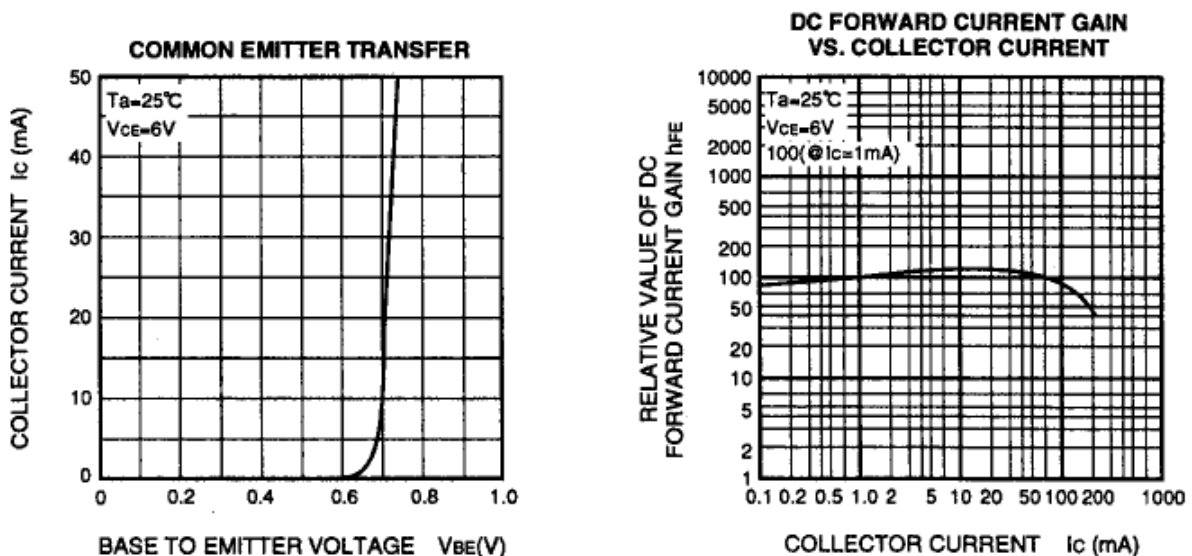
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
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

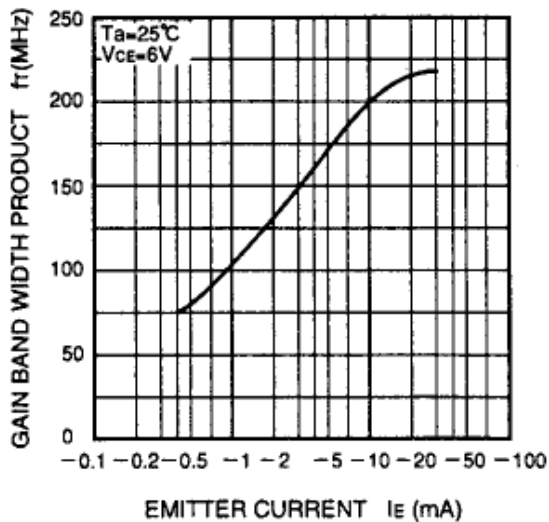




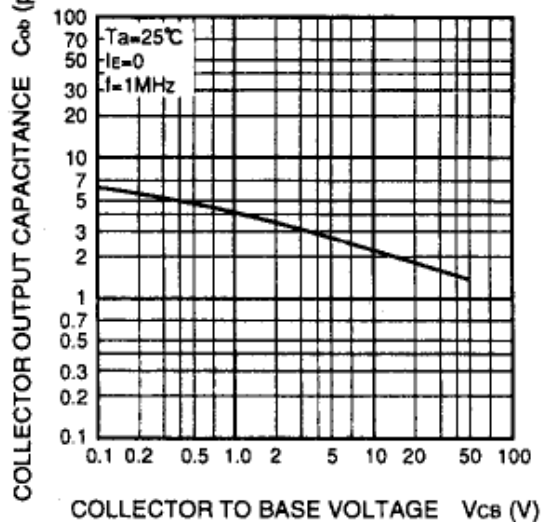
Silicon Epitaxial Planar Transistor

2SC3052

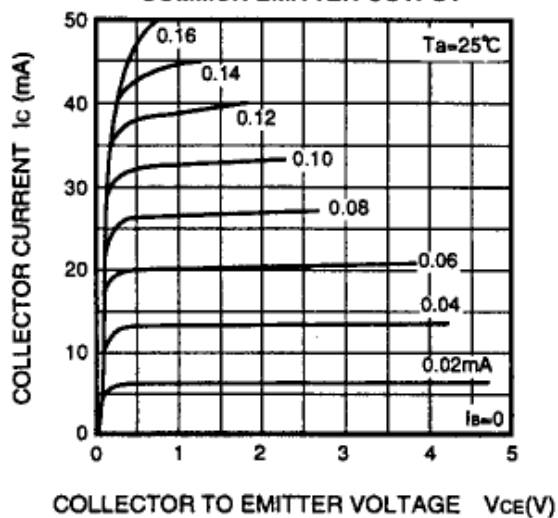
GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE



COMMON EMITTER OUTPUT



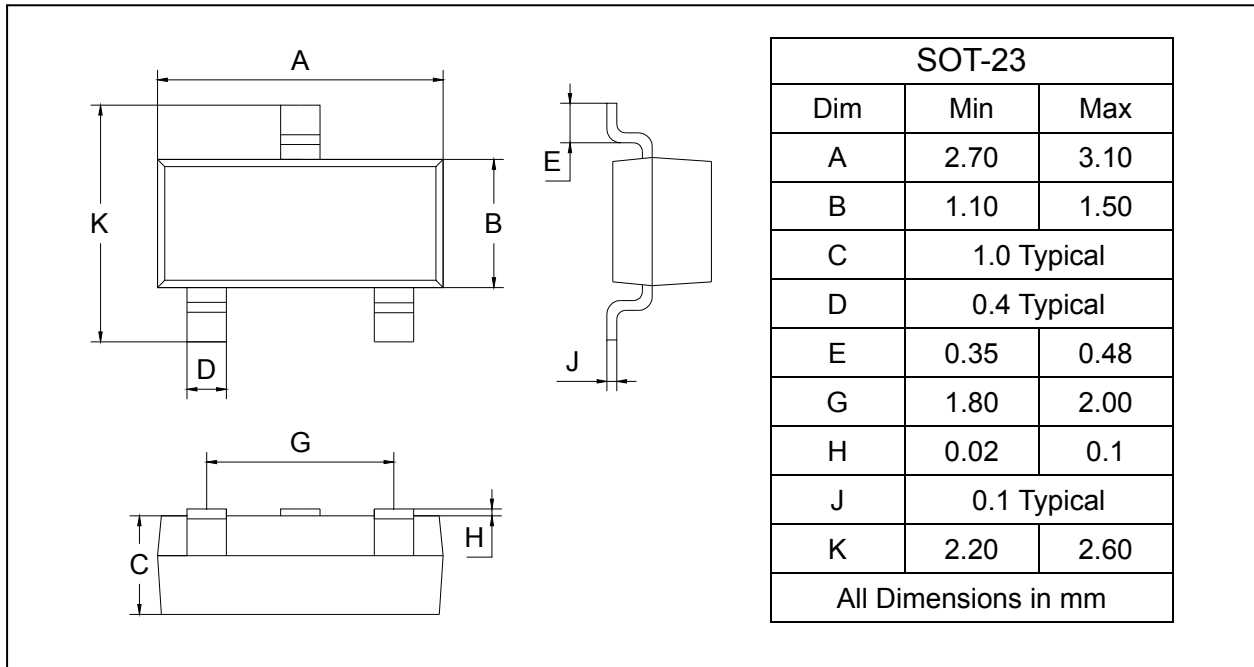
Silicon Epitaxial Planar Transistor

2SC3052

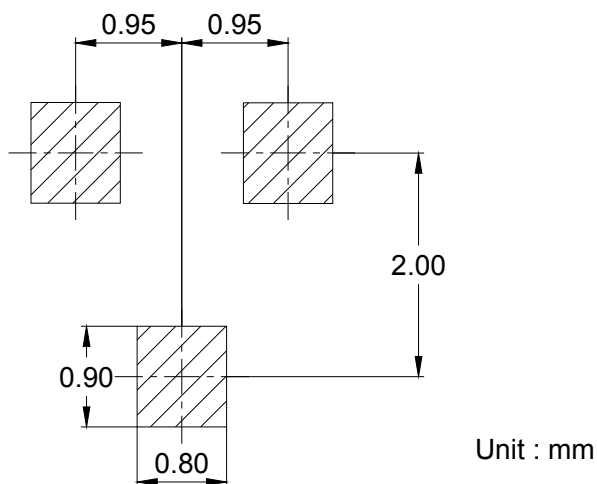
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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