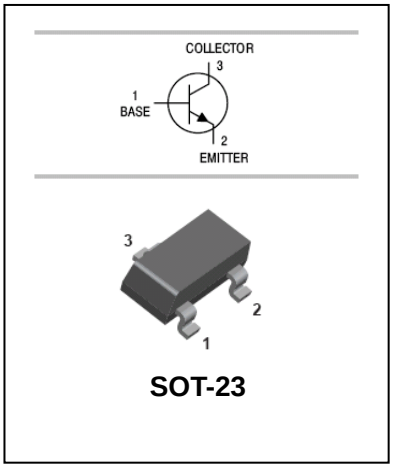
Silicon Epitaxial Planar Transistor 2SC3052

FEATURES

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

Lead-free



SOT-23

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℃ 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	℃

Silicon Epitaxial Planar Transistor **2SC3052**

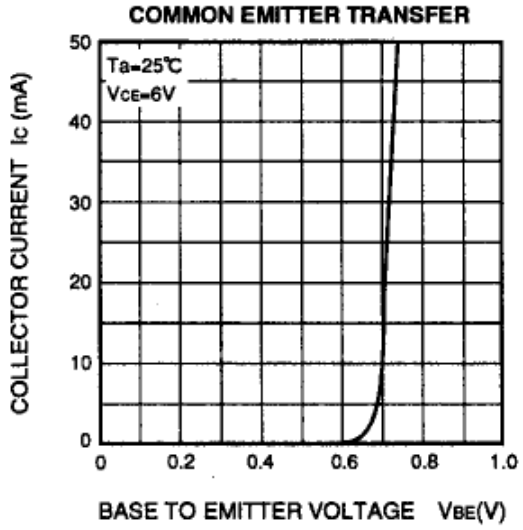
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

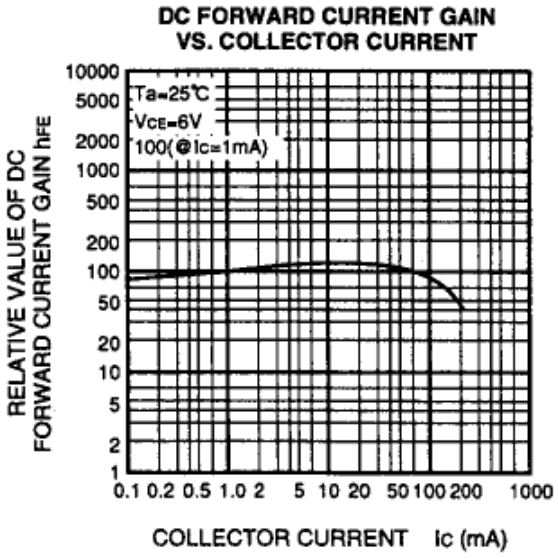
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=0.1mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0			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 V_{CE}=6V,I_C=0.1mA	150 90		800	
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=2kΩ			20	dB

CLASSIFICATION OF h_{FE}

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

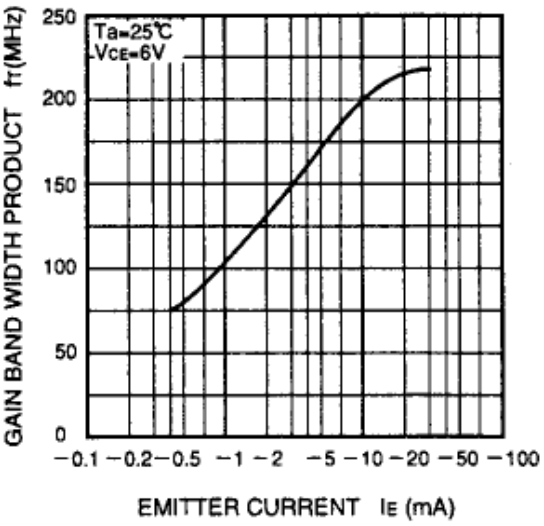
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



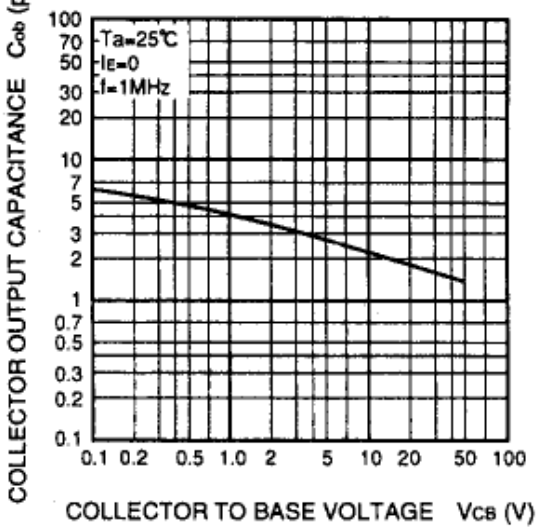


Silicon Epitaxial Planar Transistor **2SC3052**

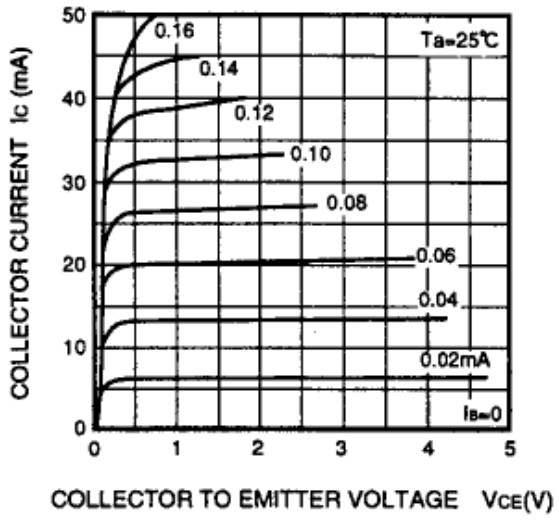
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE



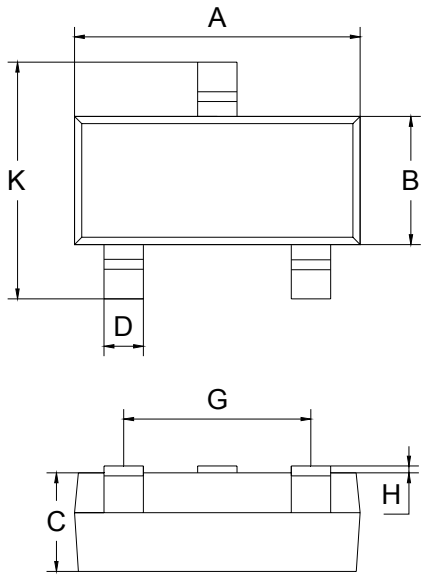
COMMON EMITTER OUTPUT



Silicon Epitaxial Planar Transistor **2SC3052**

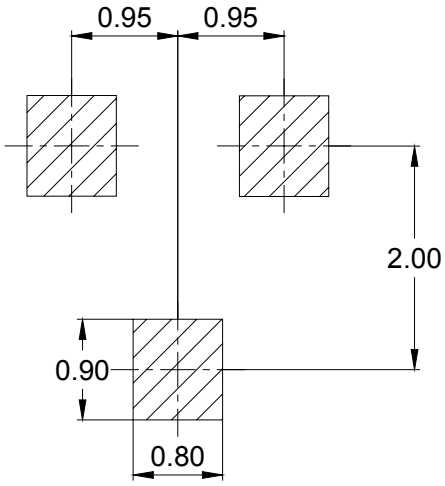
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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