

Silicon Epitaxial Planar Transistor

2SC3052

FEATURES

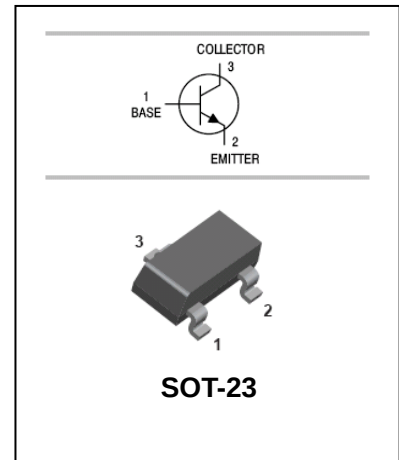
- Low collector to emitter saturation voltage.
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting.



Lead-free

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	℃

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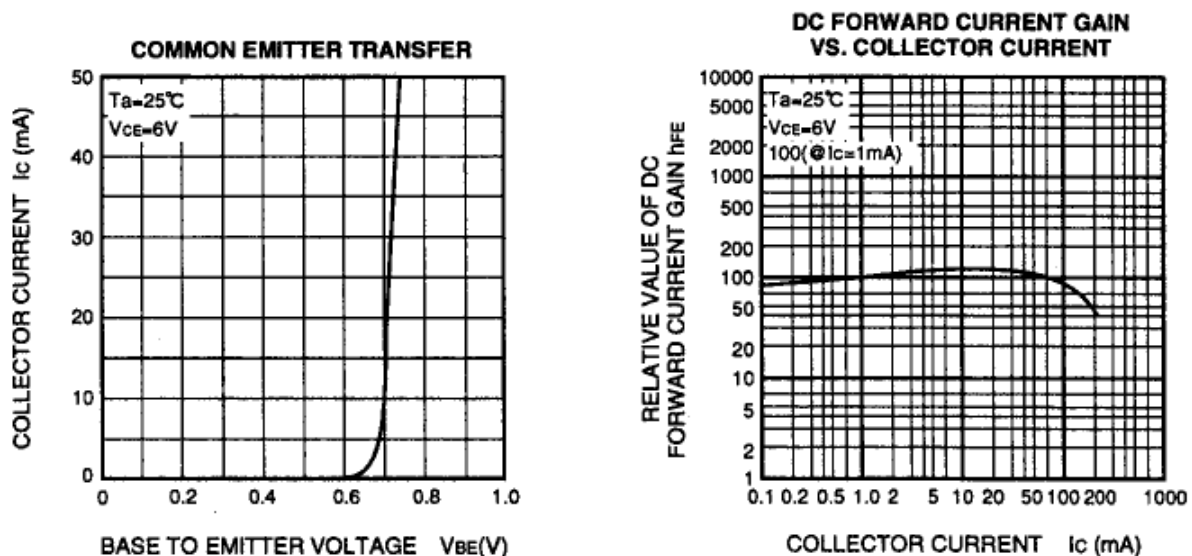
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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}

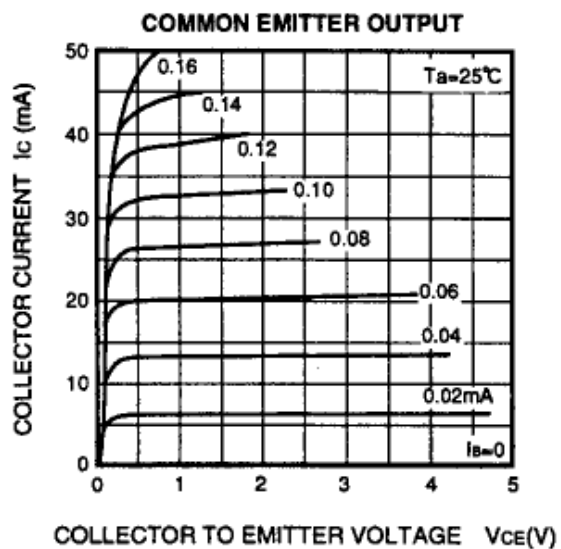
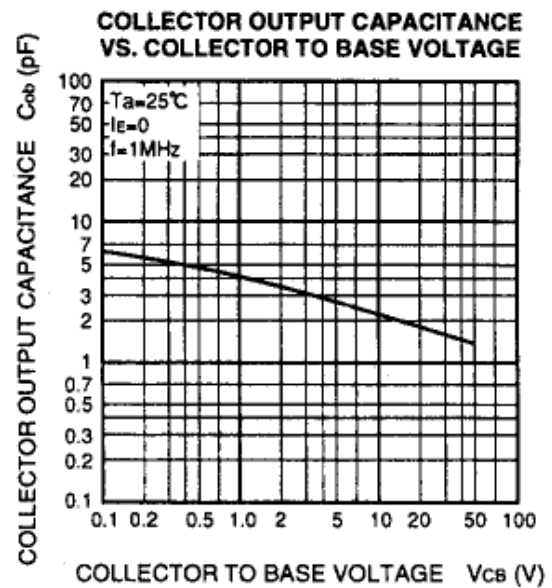
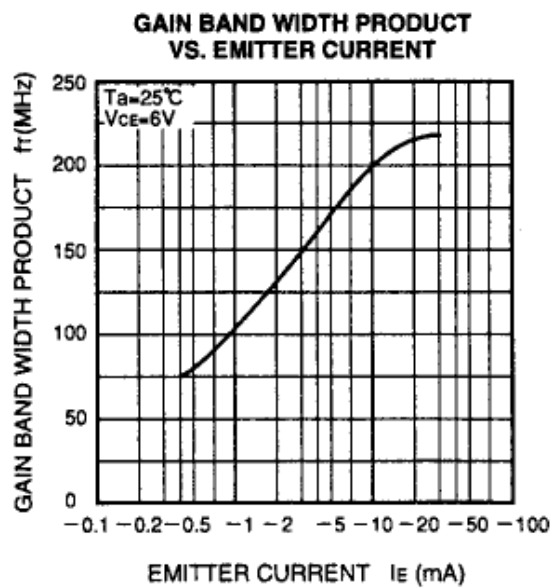
Rank	E	F	G
Range	150-300	250-500	400-800
Marking	LE	LF	LG

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



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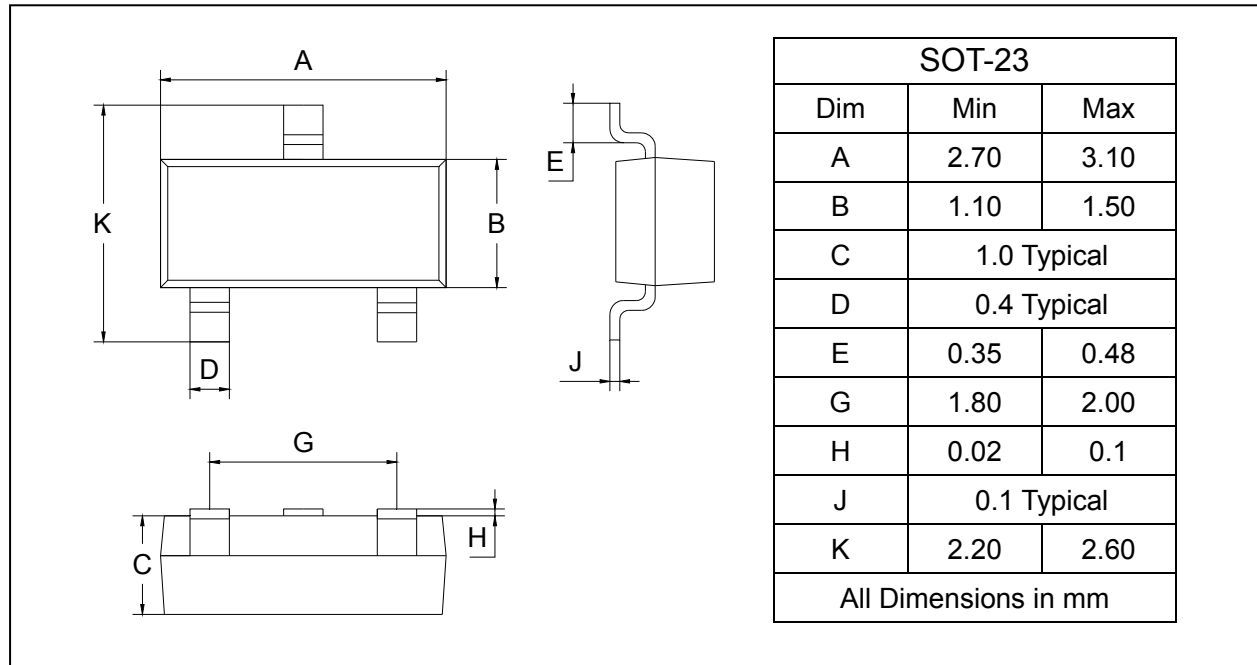
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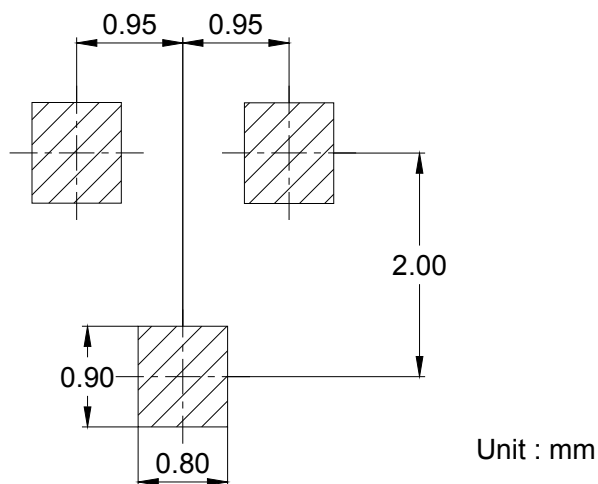
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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