

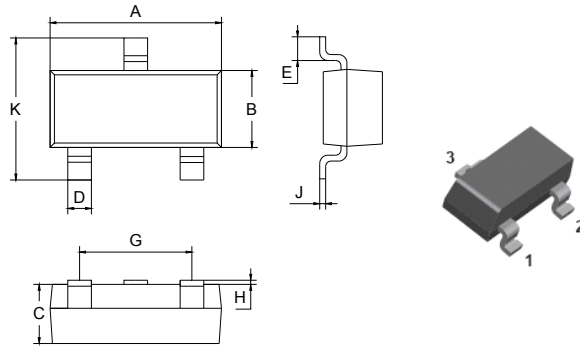


### FEATURES

- 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

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		

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

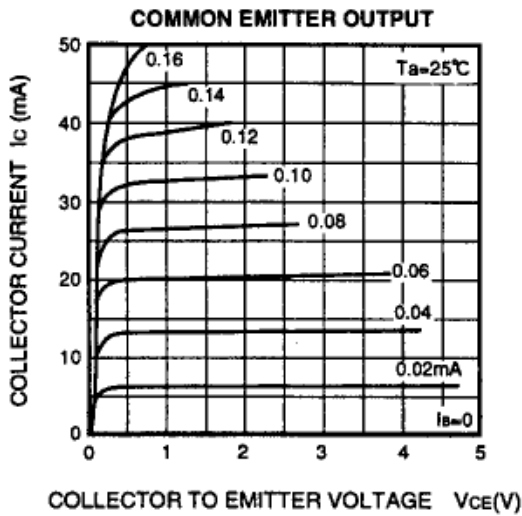
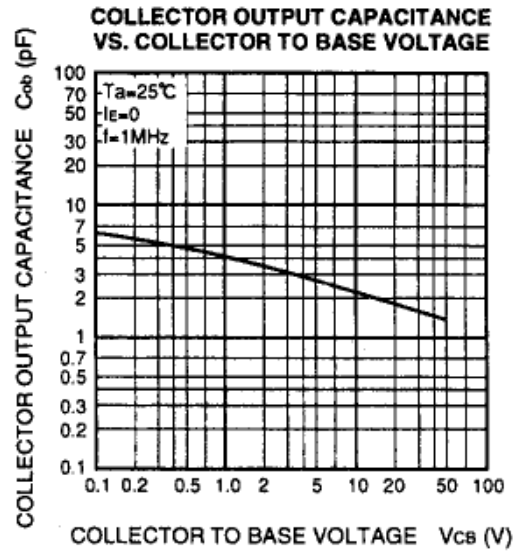
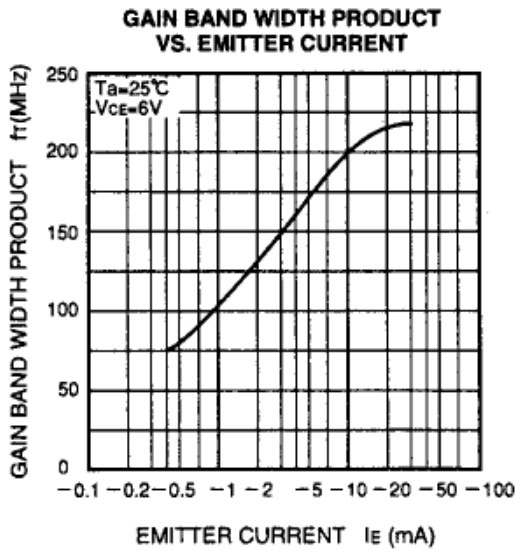
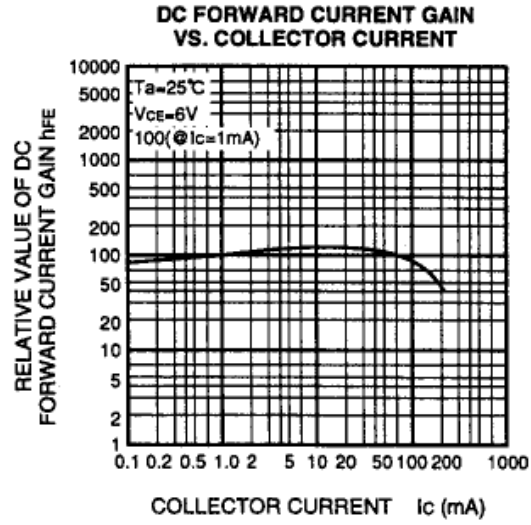
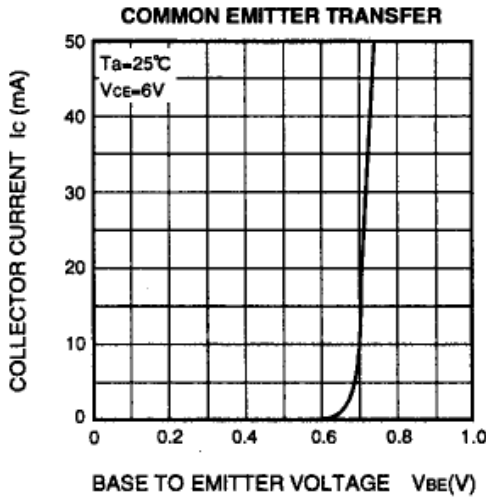
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.1mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=50V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$ $V_{CE}=6V, I_C=0.1mA$	150		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	$V_{CE}=6V, I_E=0.1mA,$ $f=1kHz, R_G=2k\Omega$			20	dB

### CLASSIFICATION OF $h_{FE}$

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



TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220