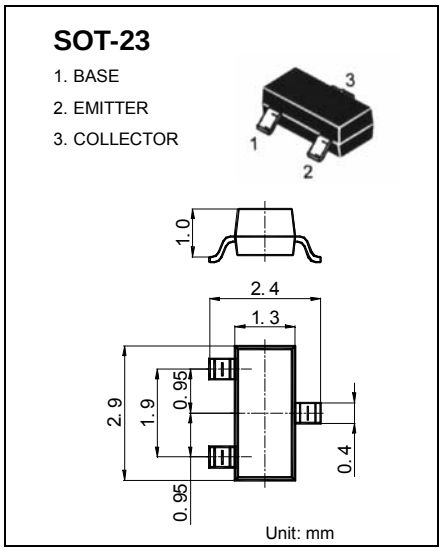
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

2SC3052 TRANSISTOR (NPN)



FEATURES

Power dissipation

P_{CM}: 0.15 W (Tamb=25℃)

Collector current

I_{CM}: 0.2 A

Collector-base voltage

$V_{(BR)\ CBO}$: 50 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)\ CBO}$	I_C = 100 μA, I_E=0	50		V
Collector-emitter breakdown voltage	$V_{(BR)\ CEO}$	I_C = 100 μA, I_B=0	50		V
Emitter-base breakdown voltage	$V_{(BR)\ EBO}$	I_E= 100 μA, I_C=0	6		V
Collector cut-off current	I_{CBO}	V_{CB}= 50 V , I_E=0		0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 6V , I_C=0		0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}= 6V, I_C= 1mA	150	800	
	$h_{FE(2)}$	V_{CE}= 6V, I_C= 0.1mA	50		
Collector-emitter saturation voltage	V_{CE} (sat)	I_C=100mA, I_B= 10mA		0.3	V
Base-emitter saturation voltage	V_{BE} (sat)	I_C= 100mA, I_B= 10mA		1	V
Transition frequency	f_T	V_{CE}= 6V, I_C= 10mA	180		MHz
Collector output capacitance	C_{ob}	V_{CE}=6V, I_E=0, f=1MHz		4	pF
Noise figure	NF	V_{CE}=6V,I_E=-0.1mA, f=1KHz, R_G=2KΩ		15	dB

CLASSIFICATION OF $h_{FE(1)}$

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