

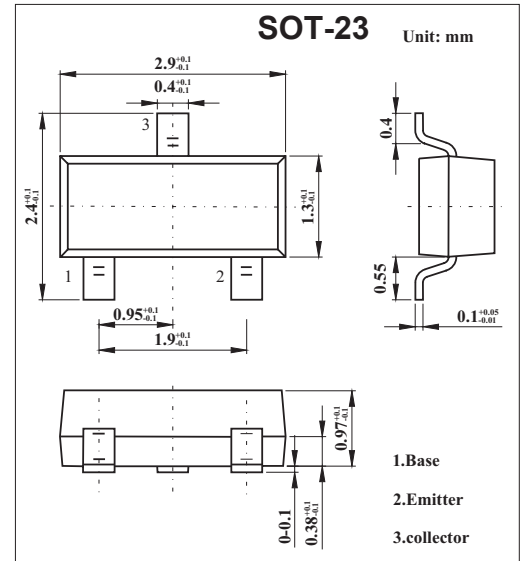
## SOT-23 Plastic-Encapsulate Transistors

### Features

- Low collector saturation voltage:  $V_{CE}=0.25V(\text{Max.})$
- Low output capacitance:  $C_{ob}=2pF(\text{Typ.})$
- NPN Silicon Transistor

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	60	V
Collector-emitter voltage	$V_{CEO}$	50	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	150	mA
Collector dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

### PACKAGE INFORMATION

Device	Package	Shipping
2SC5343	SOT-23	3000/Tape&Reel

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$BV_{CBO}$	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$BV_{CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-base breakdown voltage	$BV_{EBO}$	$I_E=10\mu A, I_C=0$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=60V, I_E=0$			0.1	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current transfer ratio	$h_{FE}$	$V_{CE}=6V, I_C=2mA$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B=100mA/10mA$			0.25	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=1mA,$	80			MHz
Output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		2	3.5	pF
Noise figure	NF	$V_{CE}=6V, I_C=0.1mA, f=1KHz, R_G=10k\Omega$			10	dB

### hFE Classification

Marking	5343			
Rank	O	Y	G	L
hFE	70~140	120~240	200~400	300~700