

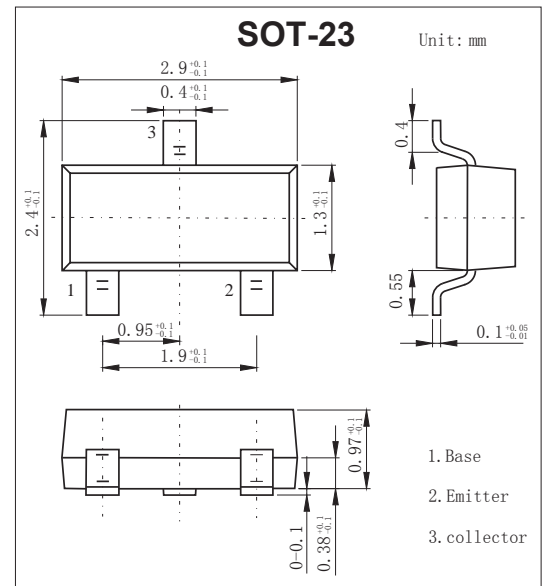
SOT-23 Plastic-Encapsulate Transistors

Features

- Power dissipation
- NPN Transistors

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	60	V
Collector to Emitter Voltage	V_{CE0}	50	V
Emitter to Base Voltage	V_{EB0}	5	V
Collector Current to Continuous	I_C	150	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 to 125	°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V_{CB0}	$I_C=100\mu A, I_E=0$	60			V
Collector to emitter breakdown voltage	V_{CE0}	$I_C=0.1mA, I_B=0$	50			V
Collector cut to off current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Collector cut to off current	I_{CEO}	$V_{CE}=40V, I_B=0$			1	μA
Emitter cut to off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=2mA$	130		400	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$			0.25	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$			1	V
Transition frequency	f_T	$V_{CE}=10V, I_C=1mA, f=30MHz$	80			MHz

hFE Classification

Type	2SC1815-L	2SC1815-H
Range	130-200	200-400
Marking	HFL	HF

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

