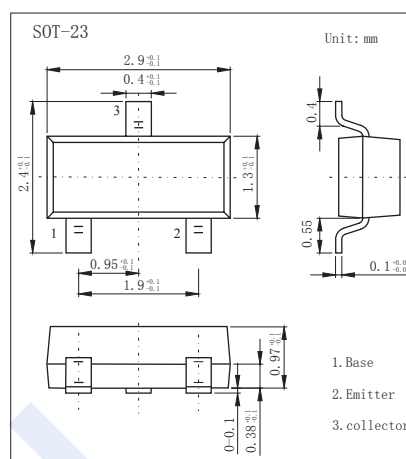


## PNP Transistors

### 2SA733-HF

#### ■ Features

- Collector-Base Voltage:  $V_{CB0}=-60V$
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CB0}$	-60	V
Collector to emitter voltage	$V_{CEO}$	-50	V
Emitter to base voltage	$V_{EBO}$	-5.0	V
Collector Current (DC)	$I_C$	-150	mA
Power dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_C = -50 \mu A, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C = -1 mA, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{EBO}$	$I_E = -50 \mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -60 V, I_E = 0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -6 V, I_C = -1 mA$	120		475	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 mA, I_B = -10 mA$		-0.18	-0.3	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE} = -6 V, I_C = -1.0 mA$	-0.58	-0.62	-0.68	V
Collector output capacitance	$C_{ob}$	$V_{CB} = -10 V, I_E = 0, f = 1 MHz$		4.5	7	pF
Noise figure	NF	$V_{CE} = -6 V, I_C = -0.3 mA, R_g = 10 k\Omega, f = 100 Hz$		6	20	dB
Transition frequency	$f_T$	$V_{CE} = -6 V, I_C = -10 mA$	50			MHz

#### ■ Classification of $h_{FE}$

Type	2SA733-M6-HF	2SA733-L-HF	2SA733-H-HF
Range	200-400	120-220	220-475
Marking	M6 <sub>F</sub>	CSL <sub>F</sub>	CS <sub>F</sub>

# PNP Transistors

## 2SA733-HF

### Typical Characteristics

