

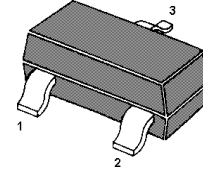
SOT-23 Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

- Driver Transistors

MARKING:1H



1.Base 2.Emitter 3.Collector
SOT-23 Plastic Package

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_{C}	Collector Current	-500	mA
P_{C}	Collector Power Dissipation	225	mW
$R_{\theta\text{JA}}$	Thermal Resistance From Junction To Ambient	556	$^{\circ}\text{C}/\text{W}$
T_{j}	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

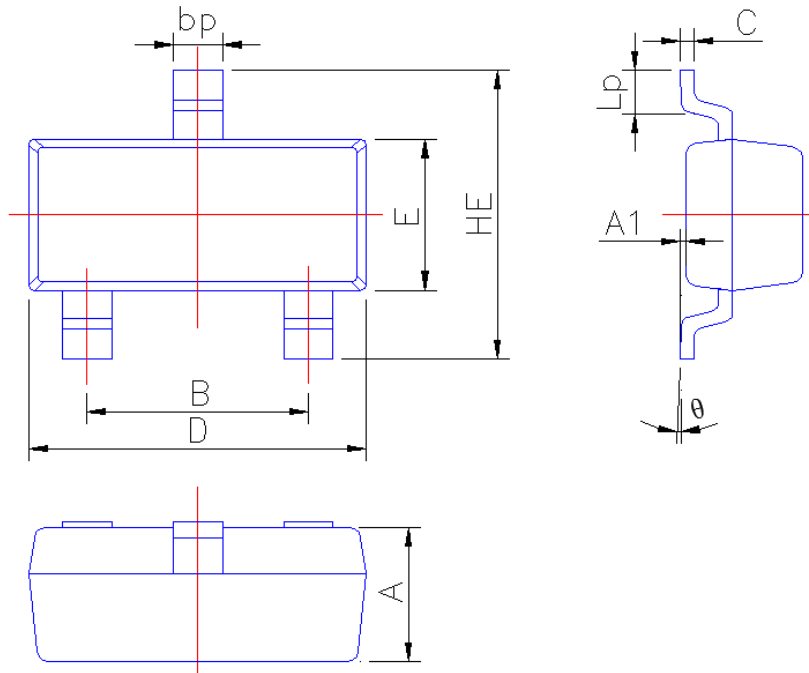
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=-100\mu\text{A}, I_{\text{E}}=0$	-60			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=-1\text{mA}, I_{\text{B}}=0$	-60			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=-100\mu\text{A}, I_{\text{C}}=0$	-4			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=-60\text{V}, I_{\text{E}}=0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{\text{CE}}=-60\text{V}, I_{\text{B}}=0$			-0.1	μA
DC current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=-1\text{V}, I_{\text{C}}=-10\text{mA}$	100		400	
	$h_{\text{FE}(2)}$	$V_{\text{CE}}=-1\text{V}, I_{\text{C}}=-100\text{mA}$	100			
Collector-emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	$I_{\text{C}}=-100\text{mA}, I_{\text{B}}=-10\text{mA}$			-0.25	V
Base-emitter voltage	V_{BE}	$V_{\text{CE}}=-1\text{V}, I_{\text{C}}=-100\text{mA}$			-1.2	V
Transition frequency	f_{T}	$V_{\text{CE}}=-1\text{V}, I_{\text{C}}=-100\text{mA}, f=100\text{MHz}$	50			MHz



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
θ	0°	5°