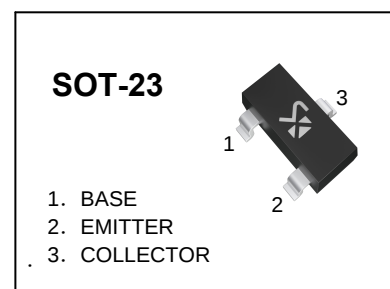


PNP Silicon Epitaxial Planar Transistor



MARKING:AE

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-15	V
V_{CEO}	Collector-Emitter Voltage	-15	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-800	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

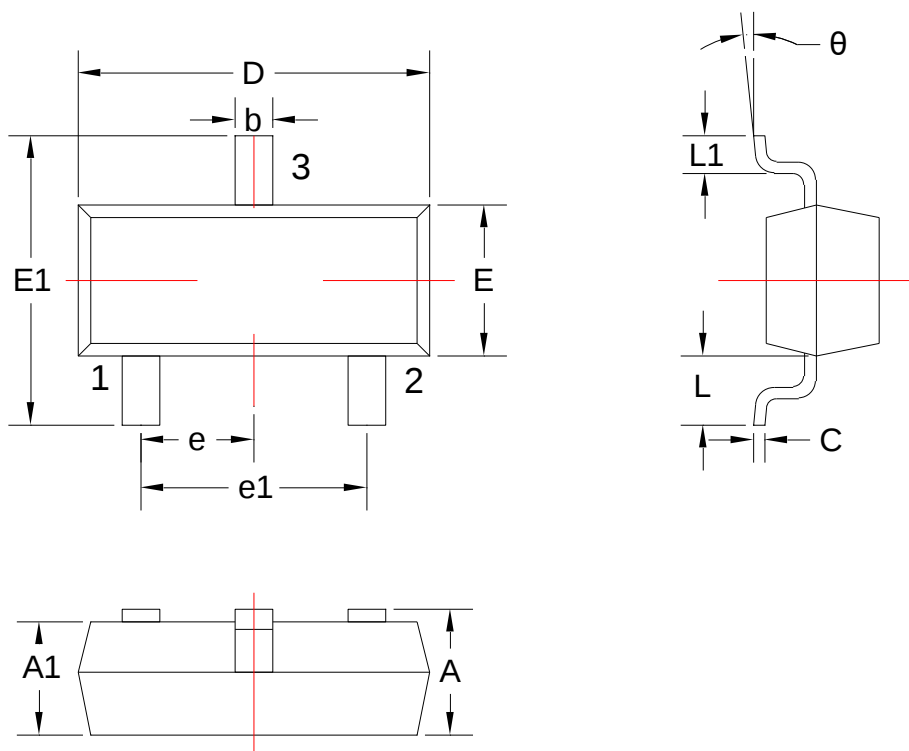
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}$, $I_E = 0$	-15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}$, $I_B = 0$	-15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}$, $I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -15\text{V}$, $I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-100	nA
DC current gain	h_{FE}	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	120		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -400\text{mA}$, $I_B = -8\text{mA}$			-0.2	V
Base-emitter voltage	V_{BE}	$V_{CE} = -1\text{V}$, $I_C = -10\text{mA}$	-0.5		-0.8	V
Transition frequency	f_T	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$		120		MHz
Collector output capacitance	C_{OB}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		13		pF

Classification of h_{FE}

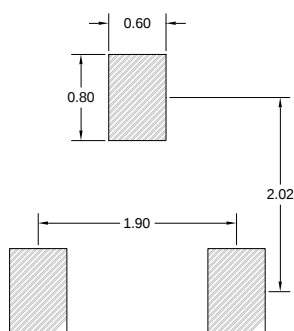
Rank	Y	G
Range	120~240	200~400

Dimension and Patterns (SOT-23)



Units: mm

Symbol	Dimensions		Symbol	Dimensions	
	Min.	Max.		Min.	Max.
A	0.900	1.150	E1	2.250	2.550
A1	0.900	1.050	e	0.950TYP	
b	0.300	0.500	e1	1.800	2.000
c	0.080	0.150	L	0.550REF	
D	2.800	3.00	L1	0.300	0.500
E	1.200	1.400	θ	0°	8°



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference only
4. Unit: mm