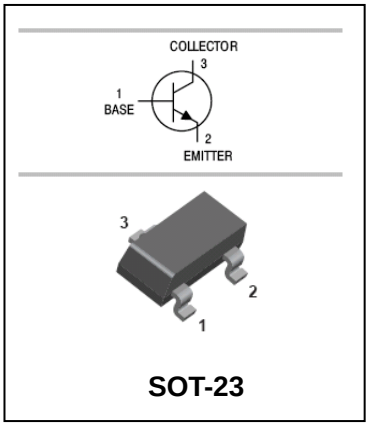
NPN Silicon Epitaxial Planar Transistor **S9011**

FEATURES

- Collector Current.(I_C= 30mA)
- Power dissipation.(P_C=200mW)

Lead-free



SOT-23

APPLICATIONS

- AM converter, AM/FM if amplifier general purpose transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
S9011	1T	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	30	mA
P_C	Collector Dissipation	200	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~150	℃

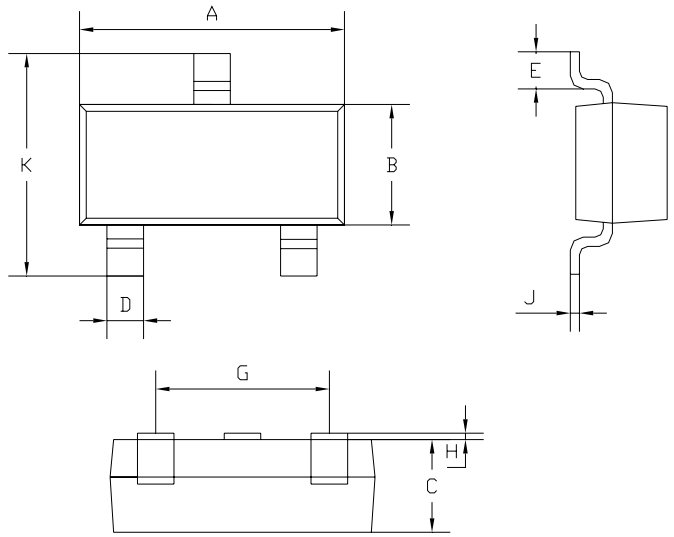
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	50		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=0.1mA,I_B=0	30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	5		V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0		0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0		0.1	μA
DC current gain	h_{FE}	V_{CE}=5V,I_C=1mA	28	198	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B= 1mA		0.3	V
Transition frequency	f_T	V_{CE}=5V, I_C= 1mA	150		MHz
Output capacitance	C_{ob}	V_{CB}=10V, I_E=0,f=1MHz		4	pF

NPN Silicon Epitaxial Planar Transistor **S9011**

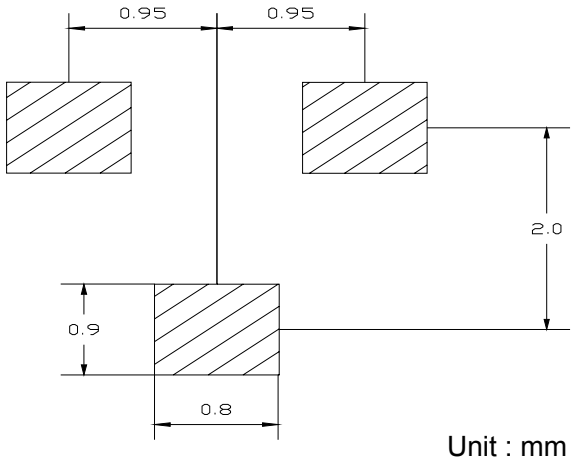
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
S9011	SOT-23	3000/Tape&Reel