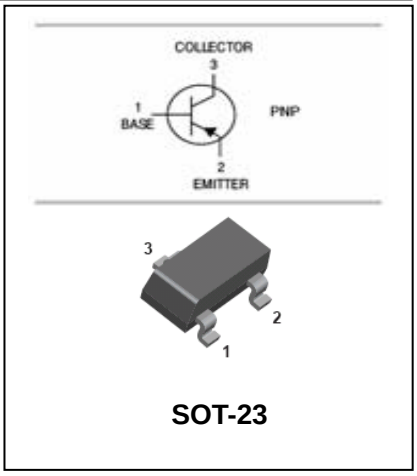
Silicon Epitaxial Planar Transistor **2SA1235A**

FEATURES

Lead-free

- Small collector to emitter saturation voltage $V_{CE(sat)}$=-0.3V max(@I_C=-100mA,I_B=-10mA).
- Excellent lineary DC forward current gain.
- Super mini package for easy mounting.



SOT-23

APPLICATIONS

- PNP epitaxial type transistor designed for low frequency.
- Voltage amplify application.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1235A	ME/MF/MG	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	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-200	mA
P_C	Collector Dissipation	150	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~125	℃

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**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=-1mA,I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-6V,I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-6V,I_C=-1mA V_{CE}=-6V,I_C=-0.1mA	150 90		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA			-0.3	V
Transition frequency	f_T	V_{CE}=-6V, I_C=-10mA		200		MHz
Collector output capacitance	C_{ob}	V_{CB}=-6V,I_E=0,f=1MHz		4		pF
Noise figure	NF	V_{CE}=-6V,I_E=0.3mA, f=100MHz,R_G=10kΩ			20	dB

CLASSIFICATION OF $h_{FE(1)}$

Rank	E	F	G
Range	150-300	250-500	400-800
Marking	ME	MF	MG

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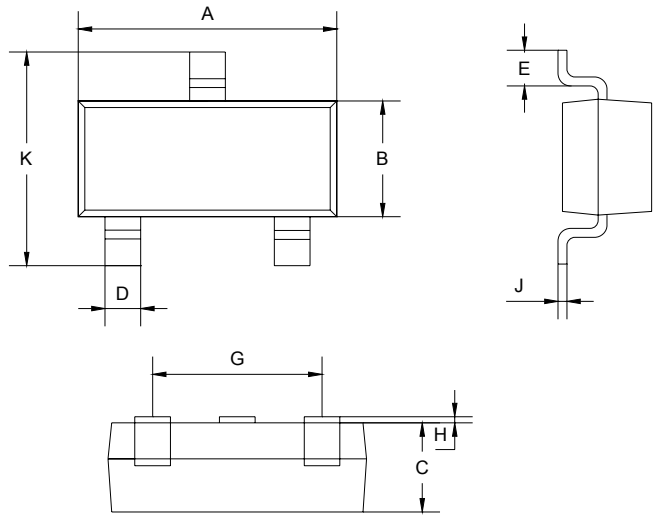
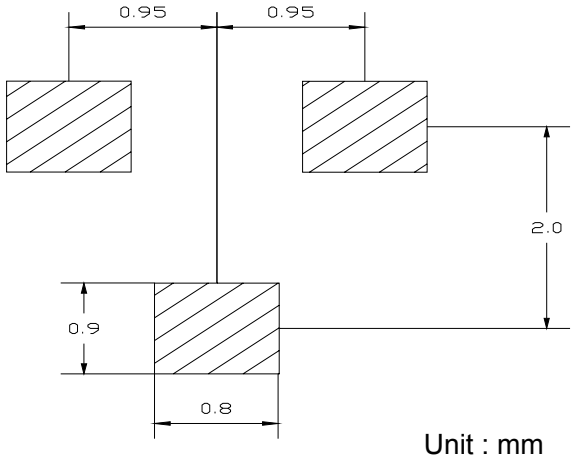
PACKAGE OUTLINE

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
2SA1235A	SOT-23	3000/Tape&Reel