WANSEMI
万代半导体

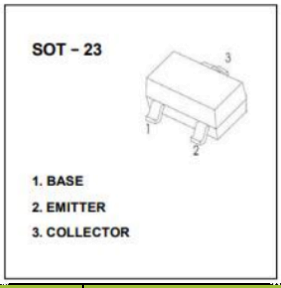
WP3904SS

SOT23 TRANSISTOR(NPN)

SOT23/TRANS(NPN)/100mA/200-400

Rev1.0

SOT23 TRANSISTOR(NPN)



1.Features

- Complementary to 3906

2.Package Marking and Ordering Information

Part no.	Marking	Package	PCS/Reel	PCS/CTN.
WP3904SS	•1AM	SOT-23	3,000	180,000

3. Maximum Ratings (TA=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter -Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	100	mA
Collector Power Dissipation	P_C	0.2	W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

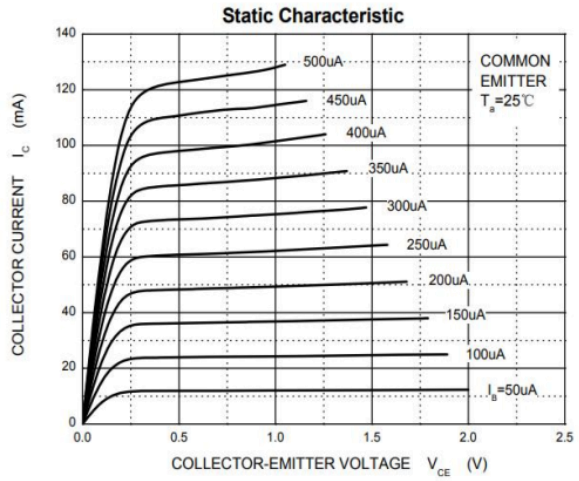
4. CLASSIFICATION OF hFE

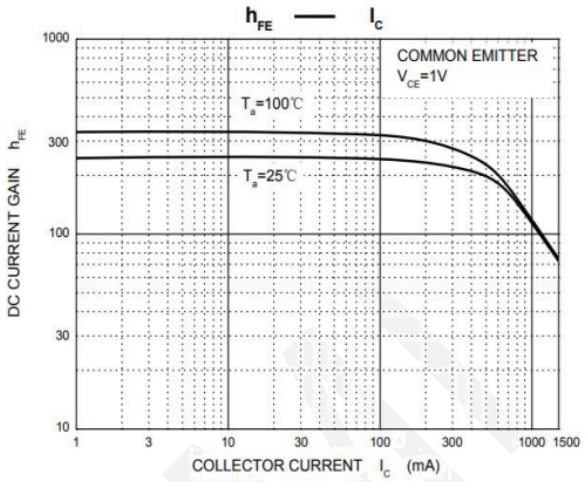
RANGE	200-400			

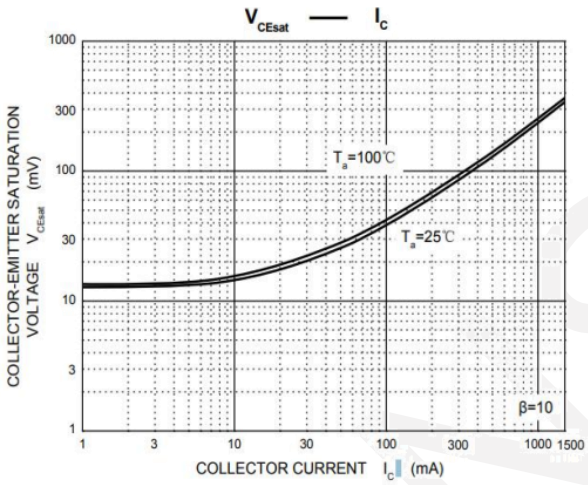
5.Electrical Characteristics at Ta=25℃

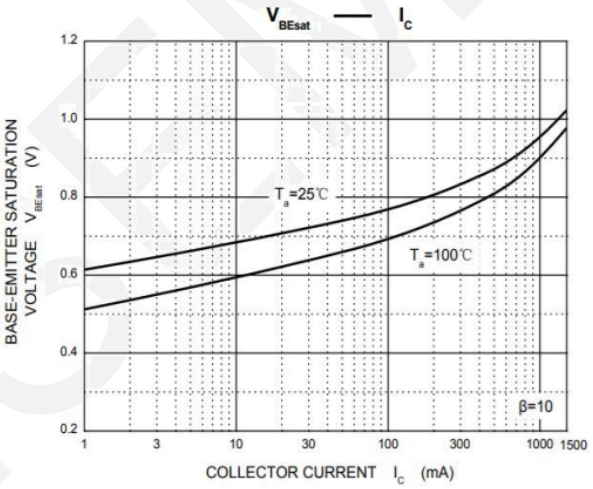
Parameter	Symbol	Test Conditions	Min.	Max.	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100uA, I_E=0	60	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	40	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100uA, I_C=0	6	-	V
Collector cut-off current	I_{CBO}	V_{CE}=60V, I_B=0	-	100	nA
Collector cut-off current	I_{CEO}	V_{CB}=30V, I_E=0	-	10	uA
Emitter cut-off current	I_{EBO}	V_{EB}=5V, I_C=0	-	100	nA
DC current gain	h_{FE}	V_{CE}=1V, I_C=10mA	80	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA, I_B=5mA	-	0.3	V
Base -emitter saturation voltage	$V_{BE(sat)}$	I_C=50mA, I_B=5mA	-	1.2	V
Transition frequency	f_T	V_{CE}=5V, I_C=10mA	100	-	MHz

6.Typical Characteristics

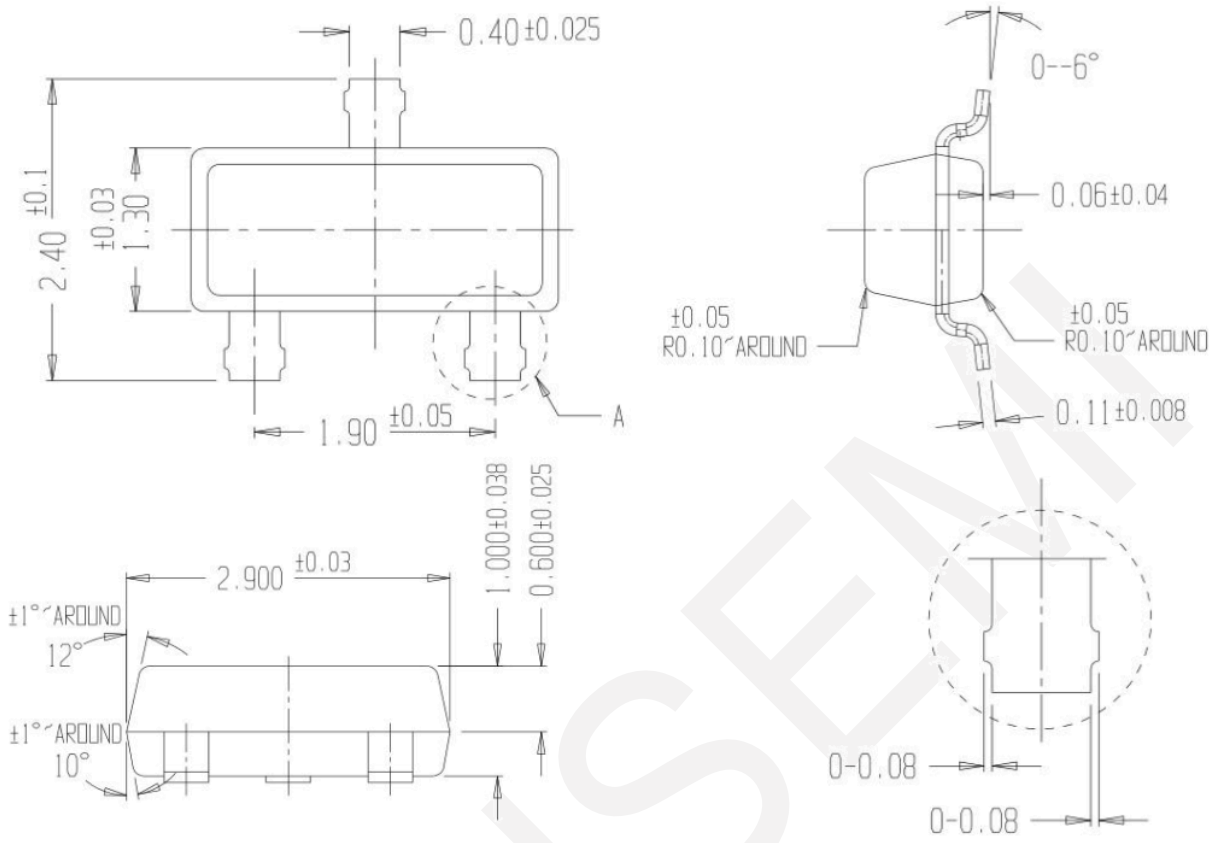








7.Package Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	0.962	1.038	0.038	0.040
A1	0.575	0.625	0.023	0.025
b	0.40	0.60	0.016	0.024
c	0.08	0.15	0.003	0.06
D	2.87	2.93	0.113	0.115
E	1.27	1.33	0.05	0.052
E1	2.3	2.5	0.090	0.098
e 1	1.85	1.95	0.073	0.077
L	0.31	0.44	0.012	0.017
L1	0.50	0.60	0.020	0.024
e	0.02	0.1	0.000	0.004

8. Important Notice

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