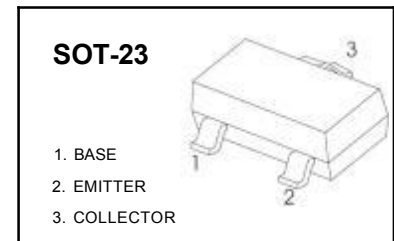


SS30101 TRANSISTOR (NPN)

FEATURES

Complimentary to SS30101

MARKING: KEY



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

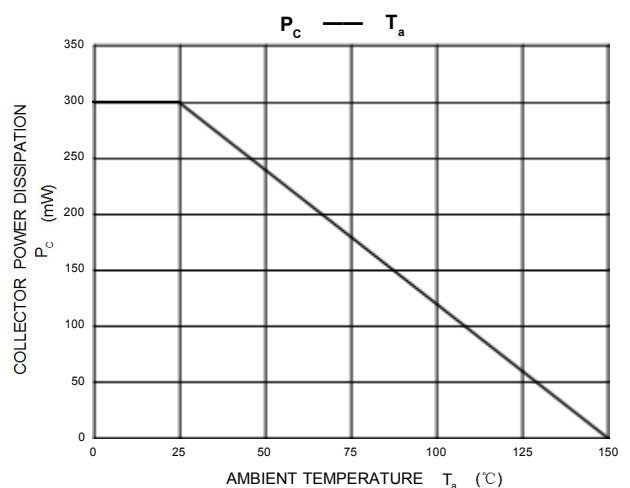
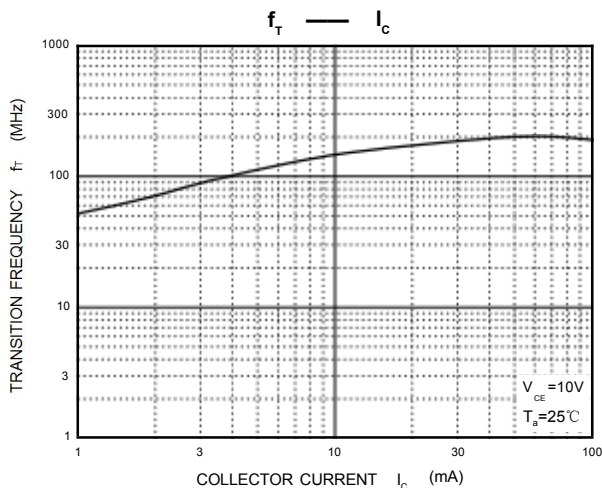
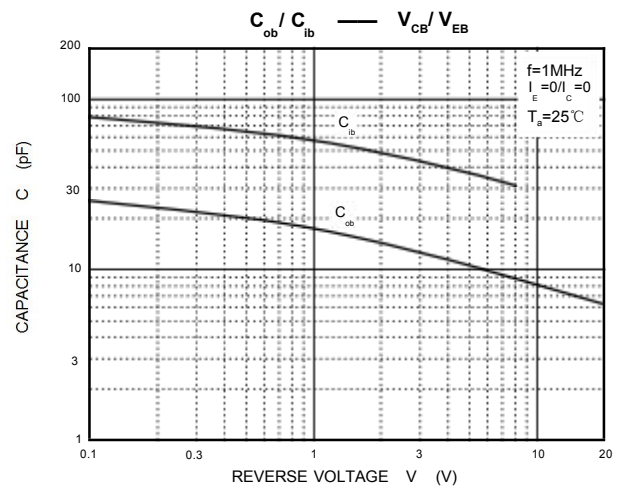
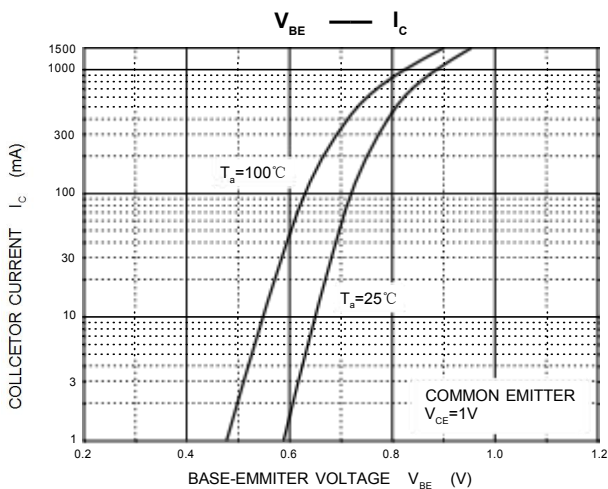
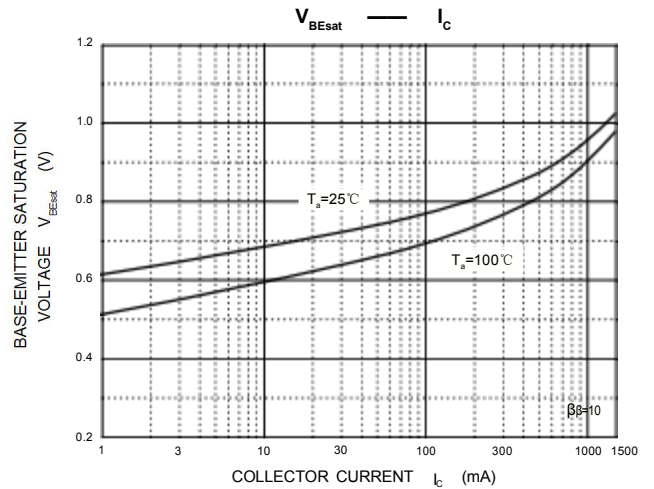
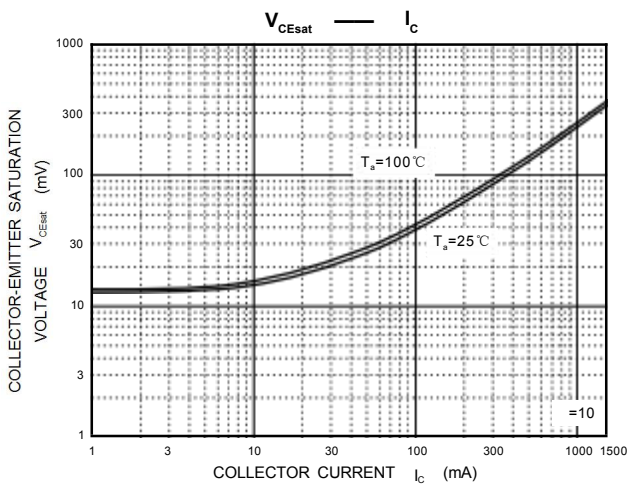
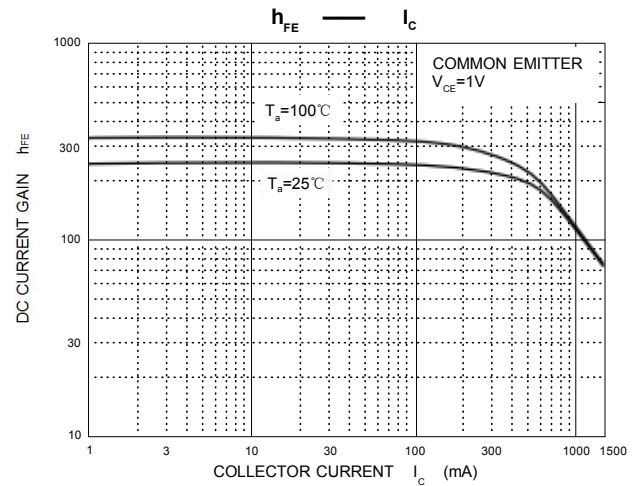
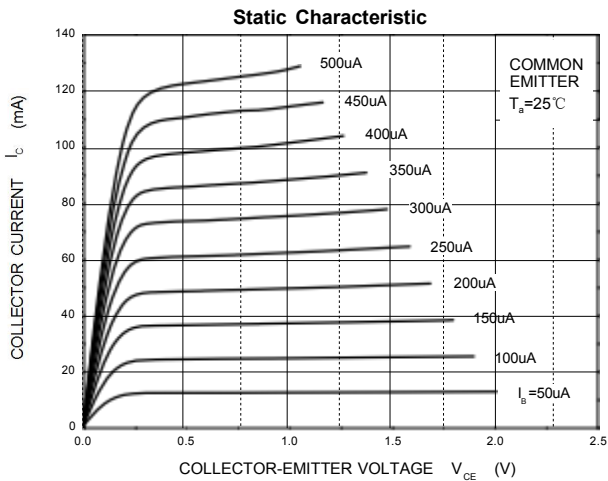
Symbo1 符号	Parameter 项目	Value 额定值	Unit 单位
V_{CBO}	Collector-Base Voltage 集电极—基极电压	50	V
V_{CEO}	Collector-Emitter Voltage 集电极—发射极电压	40	V
V_{EBO}	Emitter-Base Voltage 发射极—基极电压	6	V
I_C	Collector Current -Continuous 集电极电流	2	A
P_C	Collector Power Dissipation 集电极耗散功率	300	mw
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient 温升	556	$^\circ\text{C}/\text{W}$
T_{stg}	Storage Temperature 存储温度	-55~+150	$^\circ\text{C}$

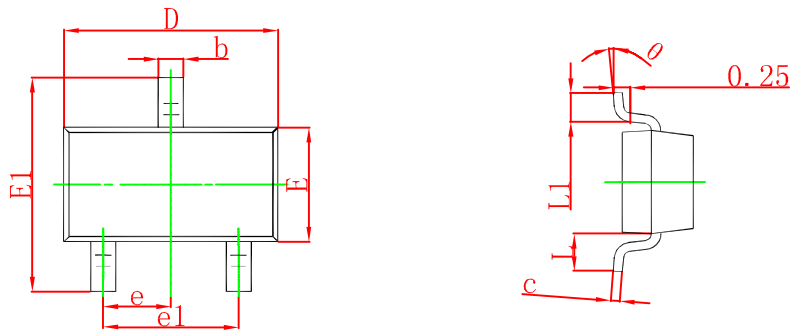
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter 项目	符号	测试条件	小值	大值	单位
Collector-base breakdown voltage 集-基极电压	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	50	60	V
Collector-emitter breakdown voltage 集-发射极电压	$V_{(BR)CEO}$	$I_C=0.1\text{mA}, I_B=0$	40	50	V
Emitter-base breakdown voltage 发射极—基极电压	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	6		V
Collector cut-off current 集电极-基极截止电流	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$		0.1	μA
Emitter cut-off current 发射极-基极截止电流	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$		0.1	μA
DC current gain 放大倍数	$h_{FE(1)}$	$V_{CE}=1\text{V}, I_C=100\text{mA}$	120	350	
	$h_{FE(2)}$	$V_{CE}=1\text{V}, I_C=800\text{mA}$	40		
Collector-emitter saturation voltage 饱和压降	$V_{CE(sat)}$	$I_C=800\text{mA}, I_B=80\text{mA}$		0.5	V
Base-emitter saturation voltage 基极-发射极饱和压降	$V_{BE(sat)}$	$I_C=800\text{mA}, I_B=80\text{mA}$		1.2	V
Transition frequency 电流增益-带宽乘积	f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}$ $f=30\text{MHz}$	100		MHz

CLASSIFICATION OF $h_{FE(1)}$

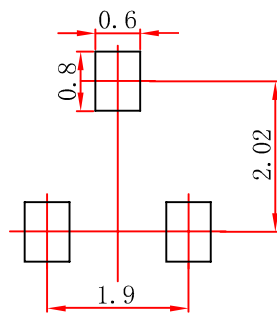
Rank	P	Q
Range	120-200	200-350





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:
 1. Controlling dimension; In millimeters.
 2. General tolerance: ± 0.05mm.
 3. The pad layout is for reference purposes only.