

TRANS ISTOR(PNP)

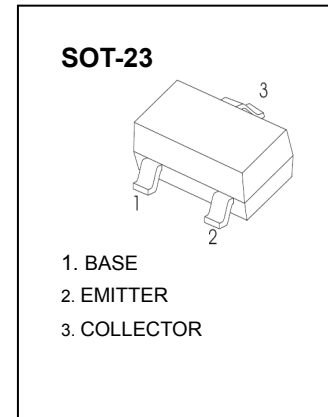
FEATURES

Power dissipation

MARKING: Y21

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-25	V
V _{EBO}	Emitter-Base Voltage	-6	V
I _C	Collector Current	-800	mA
P _C	Collector Power Dissipation	200	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	625	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CB0}	I _C = -100μA, I _E = 0	-40		V
Collector-emitter breakdown voltage	V _{(BR)CEO*}	I _C = -1mA, I _B = 0	-25		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100μA, I _C = 0	-6		V
Collector cut-off current	I _{CB0}	V _{CB} = -35V, I _E = 0		-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} = -20V, I _B = 0		-0.1	μA
DC current gain	h _{FE(1)}	V _{CE} = -1V, I _C = -5mA	45		
	h _{FE(2)}	V _{CE} = -1V, I _C = -100mA	85	400	
	h _{FE(3)}	V _{CE} = -1V, I _C = -800mA	40		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -800mA, I _B = -80mA		-0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -800mA, I _B = -80mA		-1.2	V
Transition frequency	f _T	V _{CE} = -6V, I _C = -20mA f = 30MHz	150		MHz

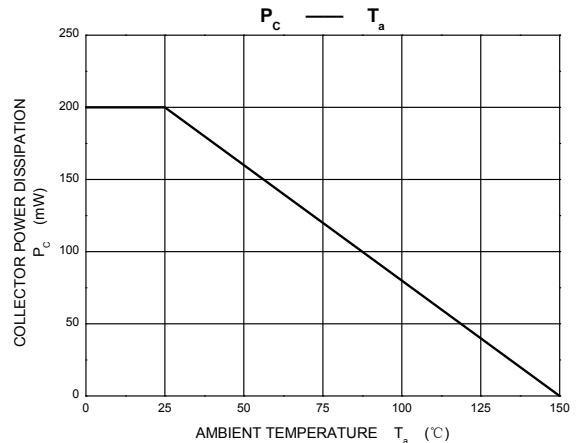
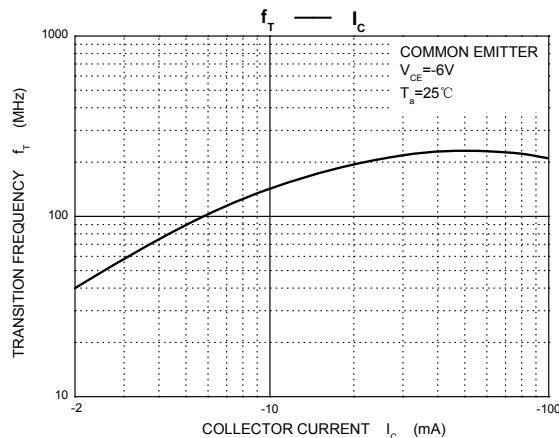
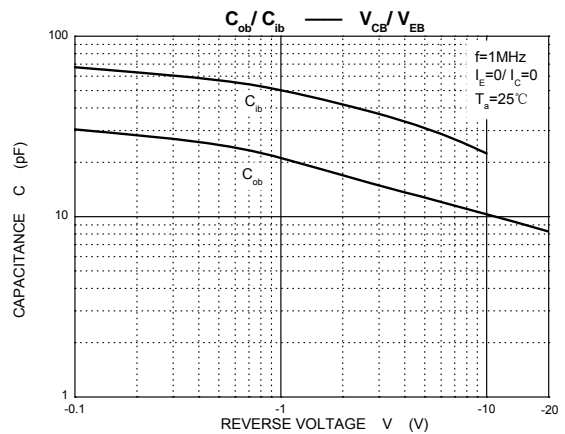
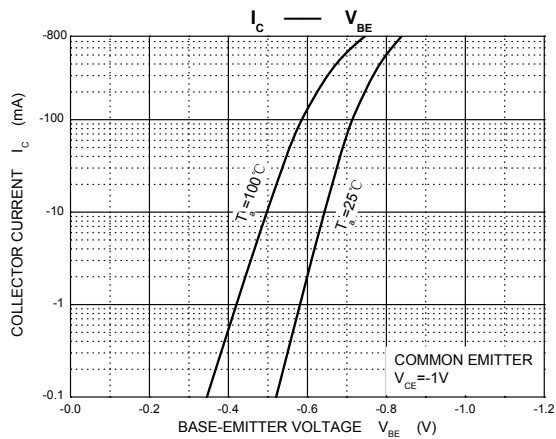
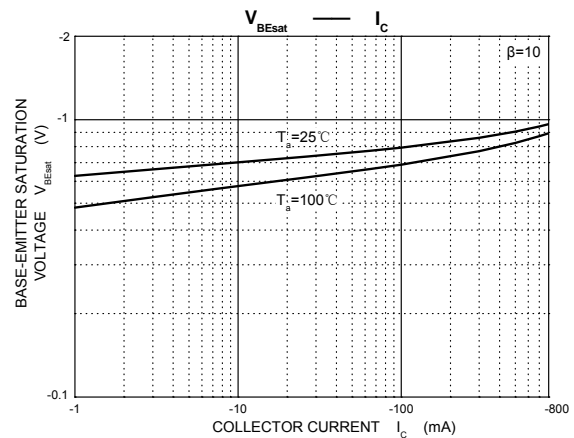
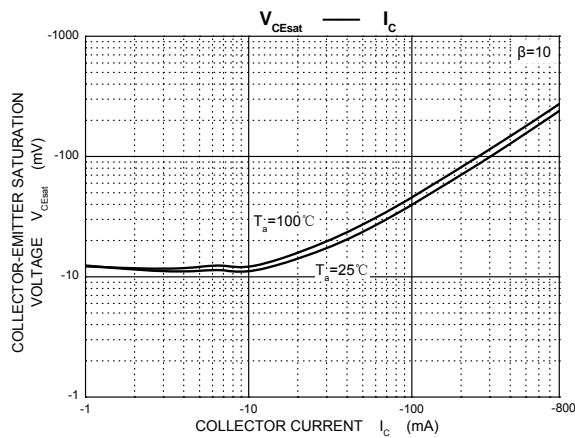
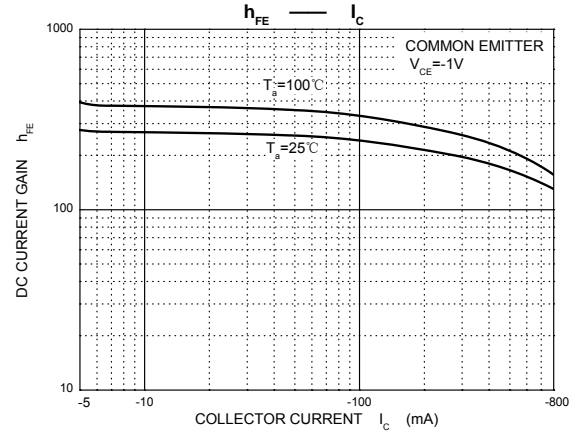
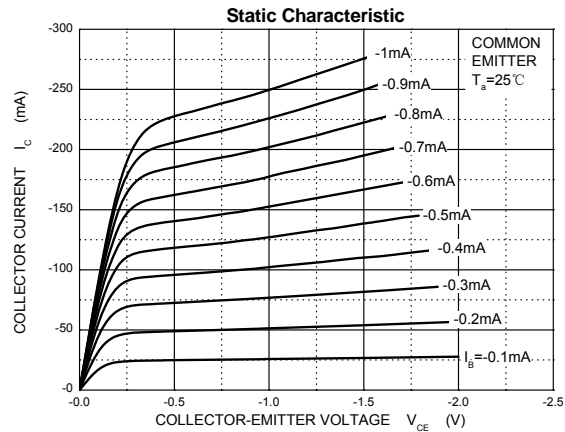
* PulseTest:pulse width ≤ 300μs , duty cycle ≤2%.

CLASSIFICATION OF h_{FE(2)}

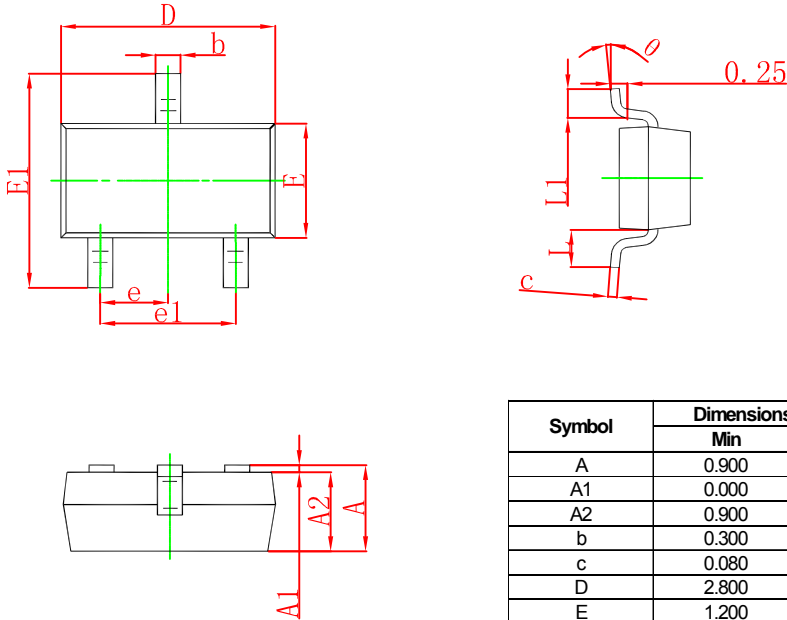
Rank	L	H
Range	85-300	300-400



Typical Characteristics

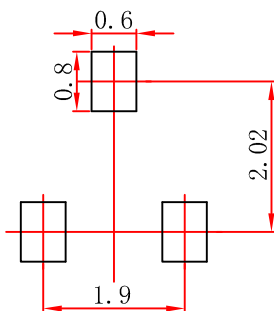


SOT-23 Package Outline Dimensions



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.