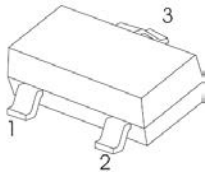
TRANSISTOR (PNP)	**SOT-323 Plastic-Encapsulate Transistors**

SOT-323

1. BASE
2. EMITTER
3. COLLECTOR



Marking :2TY

Features

- **Complimentary to S8050W**
- **Collector current: I_C=0.5A**

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

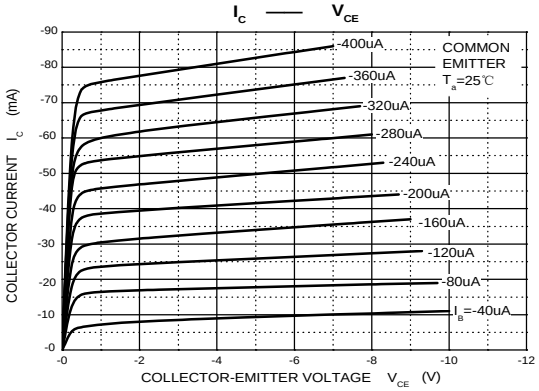
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.5	A
P_C	Collector Power Dissipation	0.2	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

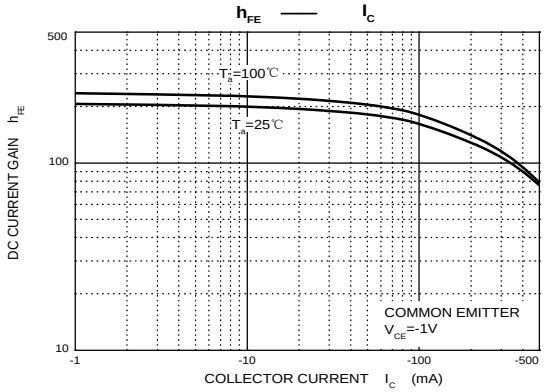
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = -100μA, I_E=0	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C =-1mA, I_B=0	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -100μA, I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}= -40V, I_E=0		-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}= -20V, I_B=0		-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -3V, I_C=0		-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}= -1V, I_C= -50mA	120	400	
	$h_{FE(2)}$	V_{CE}= -1V, I_C= -500mA	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B= -50mA		-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-500mA, I_B= -50mA		-1.2	V
Transition frequency	f_T	V_{CE}= -6V, I_C= -20mA f=30MHz	150		MHz

Typical Characteristics

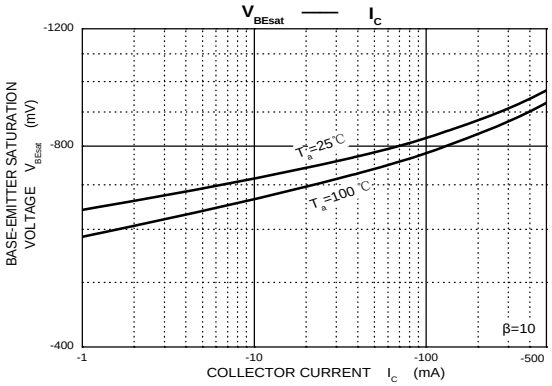
I_C —— V_{CE}



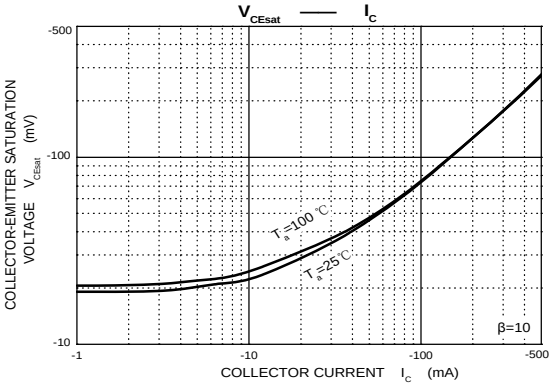
h_{FE} —— I_C



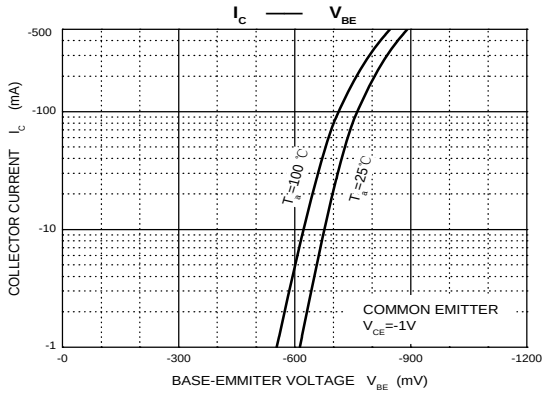
V_{BEsat} —— I_C



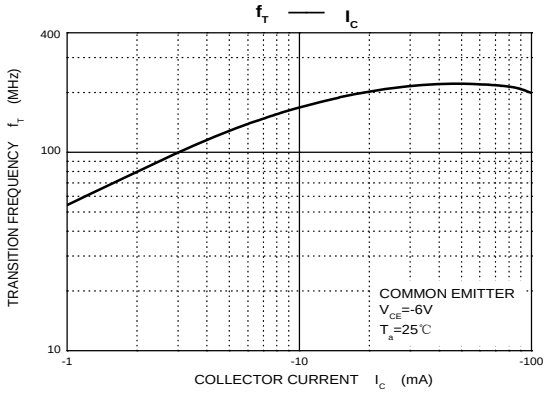
V_{CEsat} —— I_C



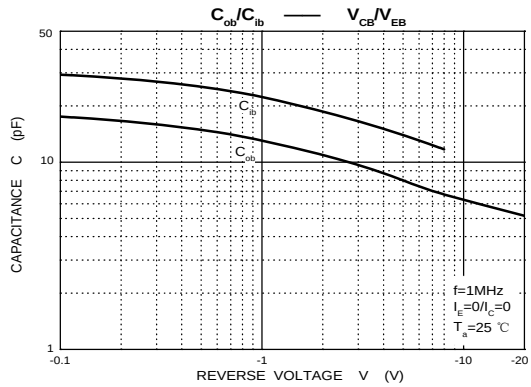
I_C —— V_{BE}



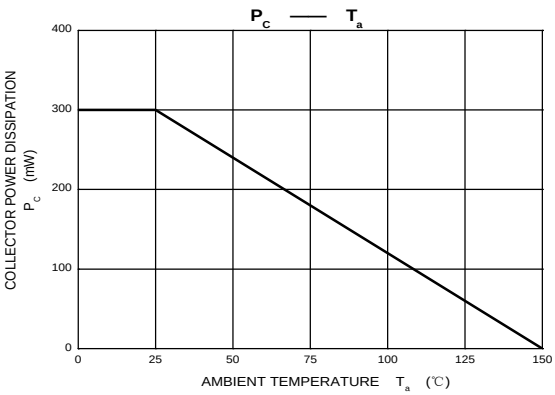
f_T —— I_C



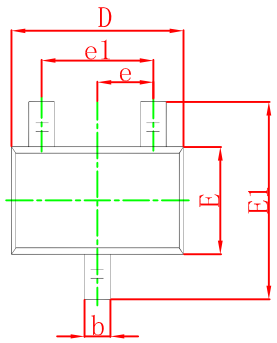
C_{ob}/C_{ib} —— V_{CB}/V_{EB}

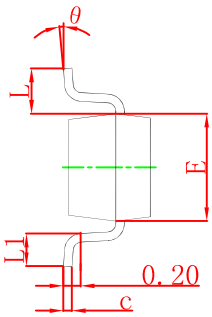


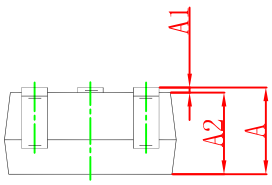
P_C —— T_a



SOT-323 Package Outline Dimensions

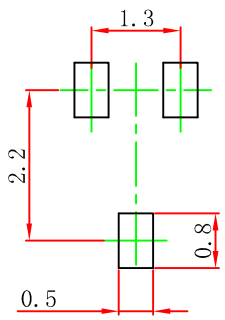






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-323 Suggested Pad Layout



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