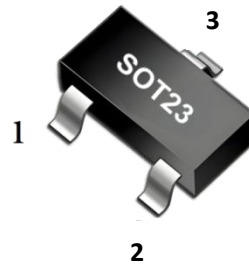


S8050

NPN SILICON TRANSISTOR

FEATURES

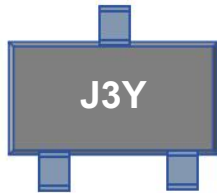
The S8050 is a low voltage high current small signal NPN transistor, designed for Class B push-pull audio amplifier and general purpose applications.



- | | |
|----|-----------|
| 1. | BASE |
| 2. | EMITTER |
| 3. | COLLECTOR |

MARKING

Type Code: Marking: J3Y



ABSOLUTE MAXIMUM RATINGS (T_c=25°C, unless otherwise specified)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-base voltage	50	V
V _{CE0}	Collector-emitter voltage	45	V
V _{EB0}	Emitter-base voltage	5	V
I _c	Collector current	100	mA
P _c	Collector Power Dissipation	200	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C
ROJA	Thermal Resistance From Junction To Ambient	625	°C/W

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

ELECTRICAL CHARACTERISTICS (T_c=25°C, unless otherwise specified)

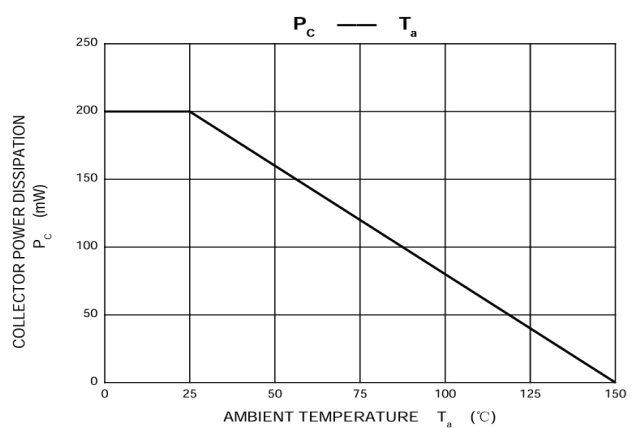
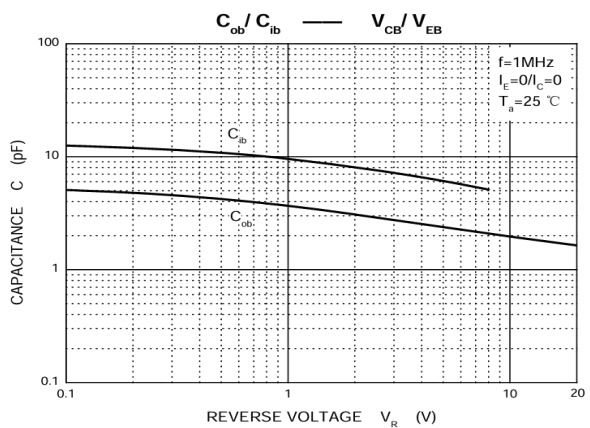
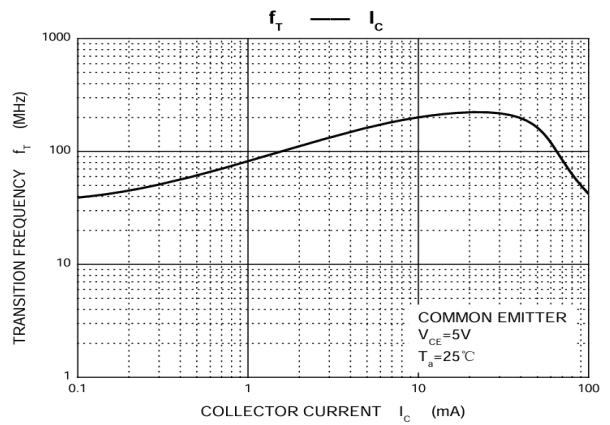
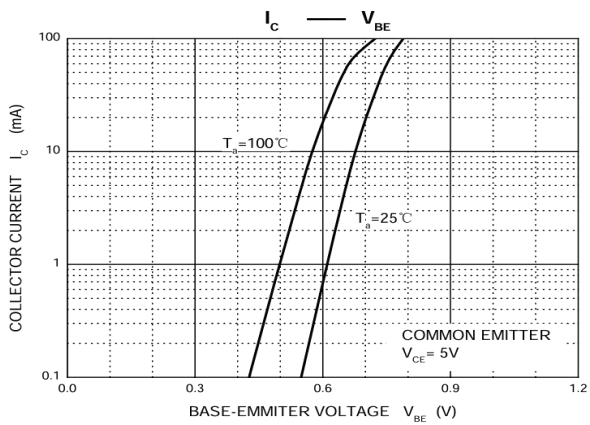
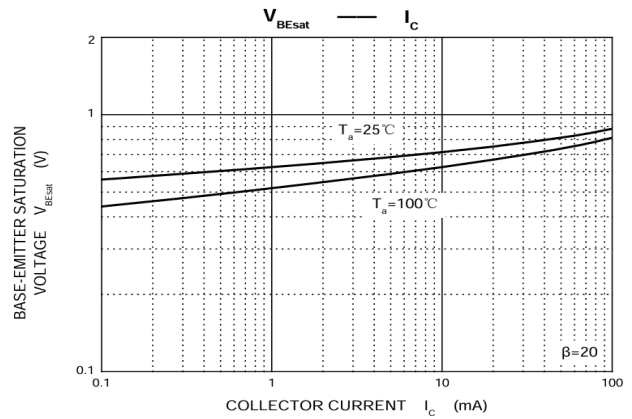
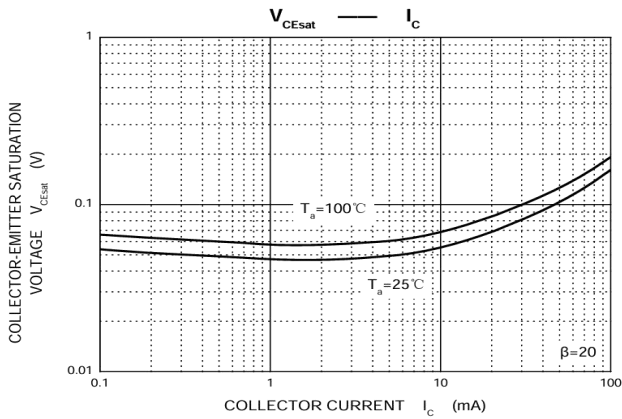
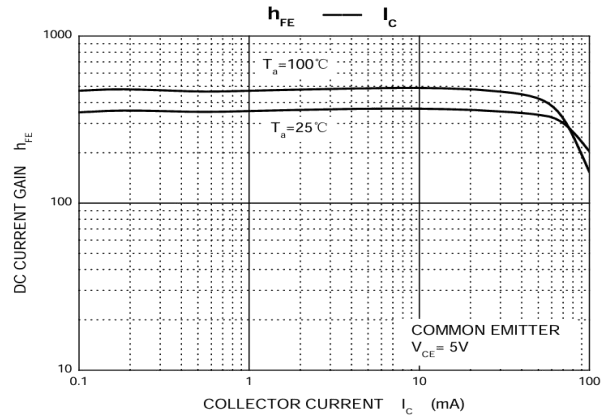
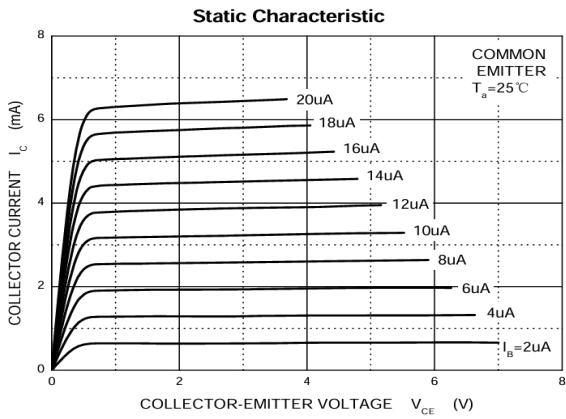
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	50		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	45		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5		V
Collector cutoff current	I _{CB0}	V _{CB} =50V, I _E =0		0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =35V, I _B =0		1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =3V, I _C =0		0.1	μA
DC Current Gain (CLASSIFICATION OF h _{FE})	h _{FE}	V _{CE} =5V, I _C =1mA	L	200	450
			H	450	1000
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =5mA		0.3	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =100mA, I _B =5mA		1	V
Transition frequency	f _T	V _{CE} =5V, I _C =10mA, f=30MHz	150		MHz



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NPN SILICON TRANSISTOR

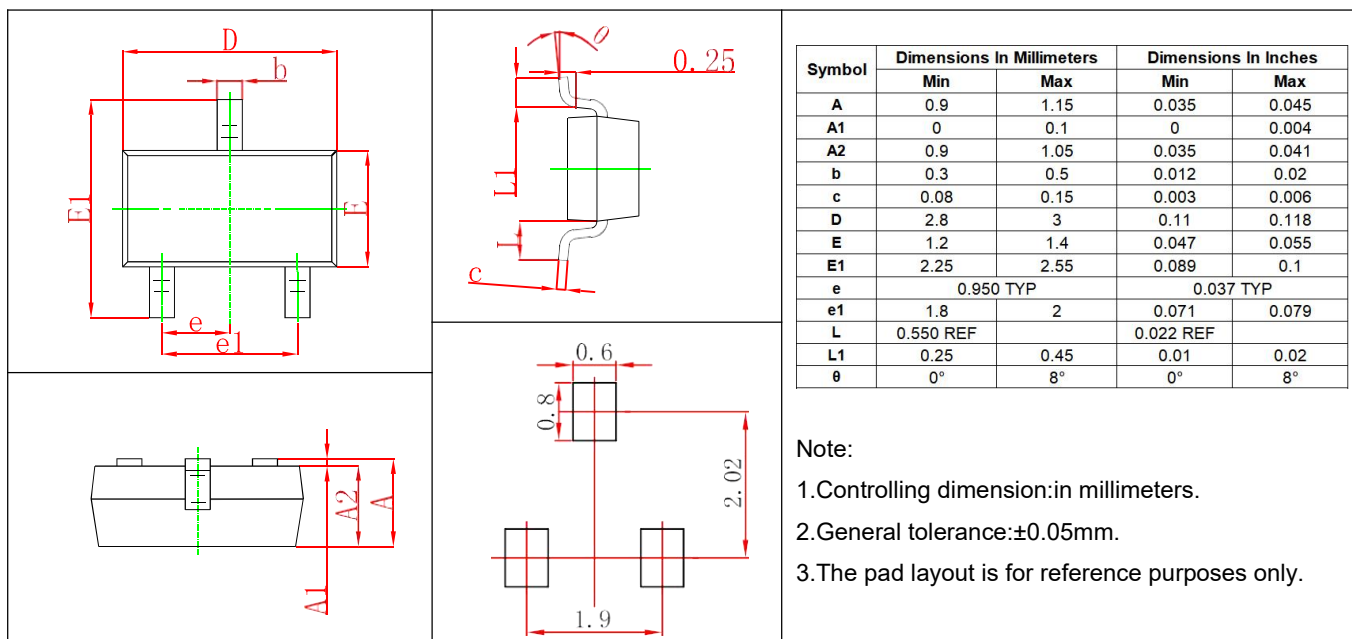
TYPICAL CHARACTERISTICS



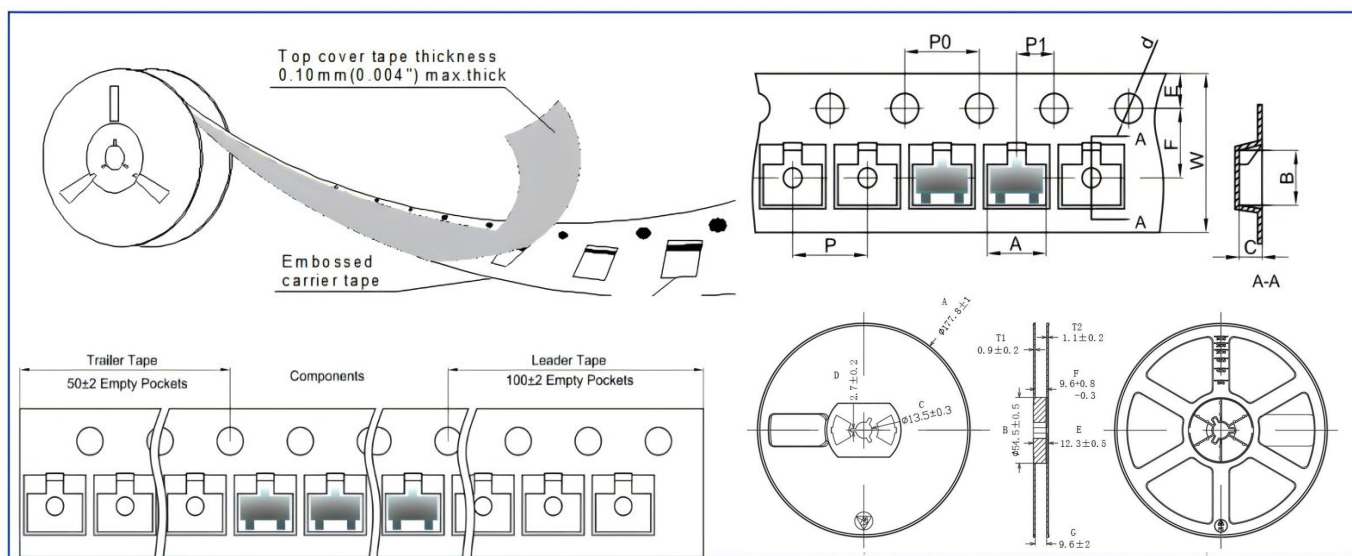
S8050

NPN SILICON TRANSISTOR

SOT23 PACKAGE OUTLINE DIMENSIONS



REEL PACKING



Dimensions are in millimeter										
PKG TYPE	A	B	C	d	E	F	Po	P	P1	W
SOT-23	3.17	2.77	1.22	Φ1.55	1.75	3.50	4.00	4.00	2.00	8.00
Reel Option	A	B	C	D	E	F	G	T1	T2	Q.TY PER REEL
7" Dia	Φ177.8	Φ54.5	Φ13.5	2.7	12.3	9.6	9.6	0.9	1.1	3000PCS