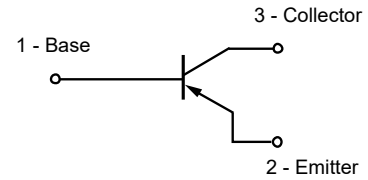


Feature

- This device is Pb-Free, Halogen Free/BFR Free and Rohs compliant.


Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- Pin flatness : ≤3mil

Structure

PNP epitaxial planar silicon transistor

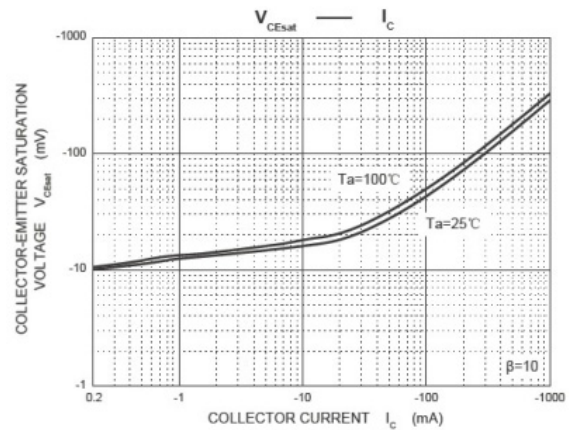
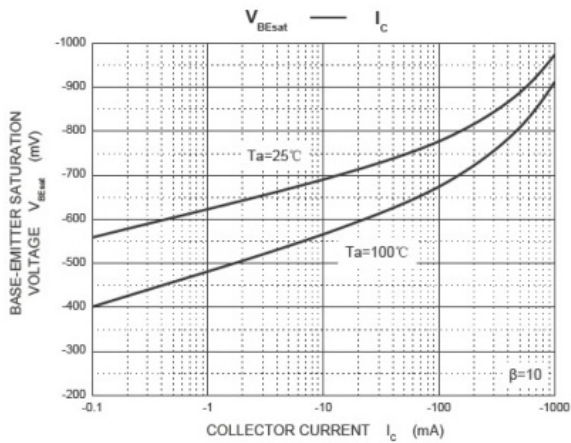
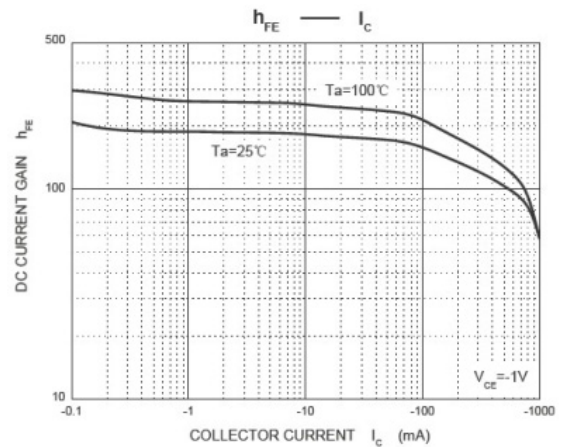
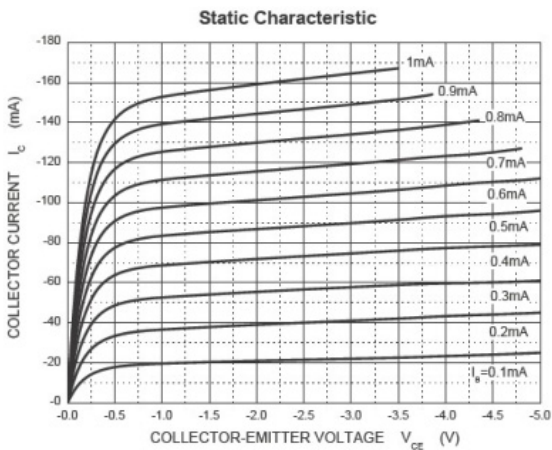
Electrical characteristics per line@25°C (unless otherwise specified)

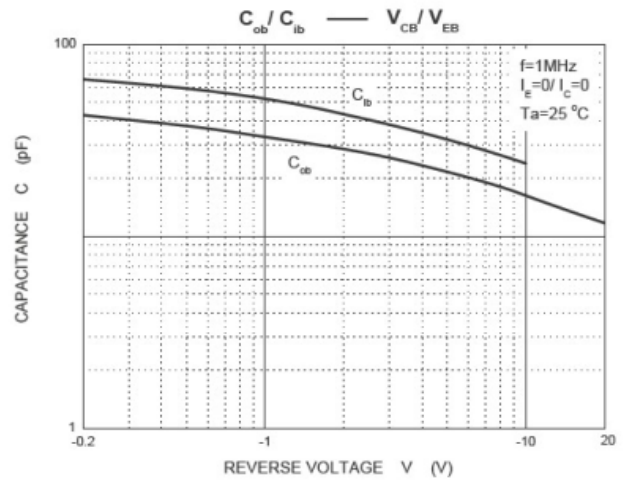
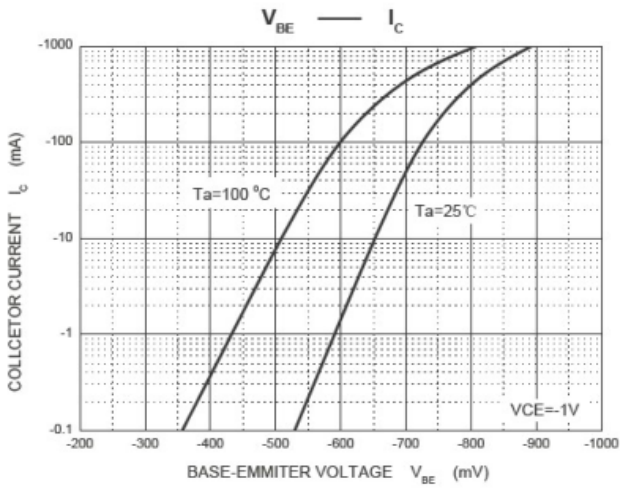
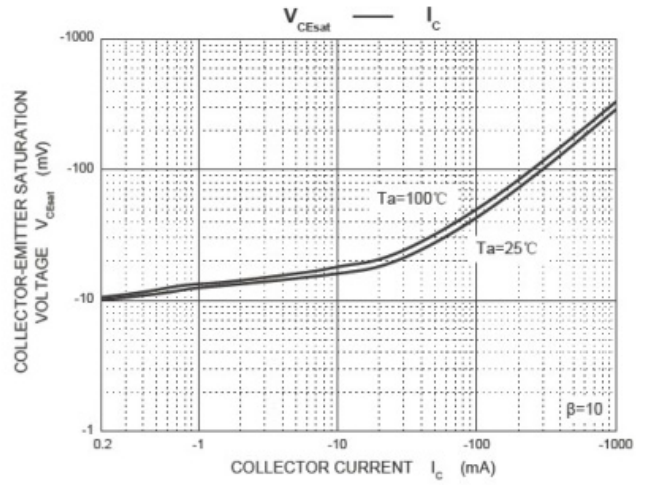
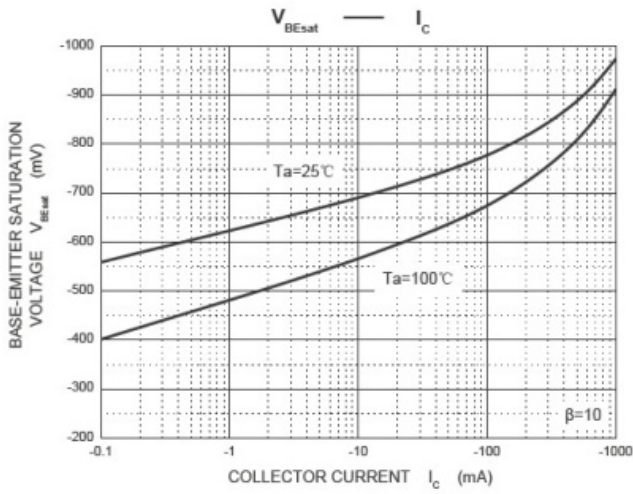
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-40			V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-0.1mA, I_B=0$	-25			V
Emitter -Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5.0			V
Collector Cutoff Current	I_{CEO}	$V_{CE}=-20V, I_B=0$			-100	nA
Collector Cutoff Current	I_{CBO}	$V_{CB}=-40V, I_E=0$			-100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-3V, I_C=0$			-100	nA
DC Current Gain	H_{FE}	$I_C=-100mA, V_{CE}=-1.0V$	200		350	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-800mA, I_B=-80mA$			-0.60	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-800mA, I_B=-80mA$			-1.20	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-1V, I_C=-10mA$			-1.00	V
Transition frequency	f_T	$V_{CE}=-10V, I_C=-50mA, F=30MHz$	100			MHz
Collect output capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$			20	pF

Absolute maximum rating@25°C

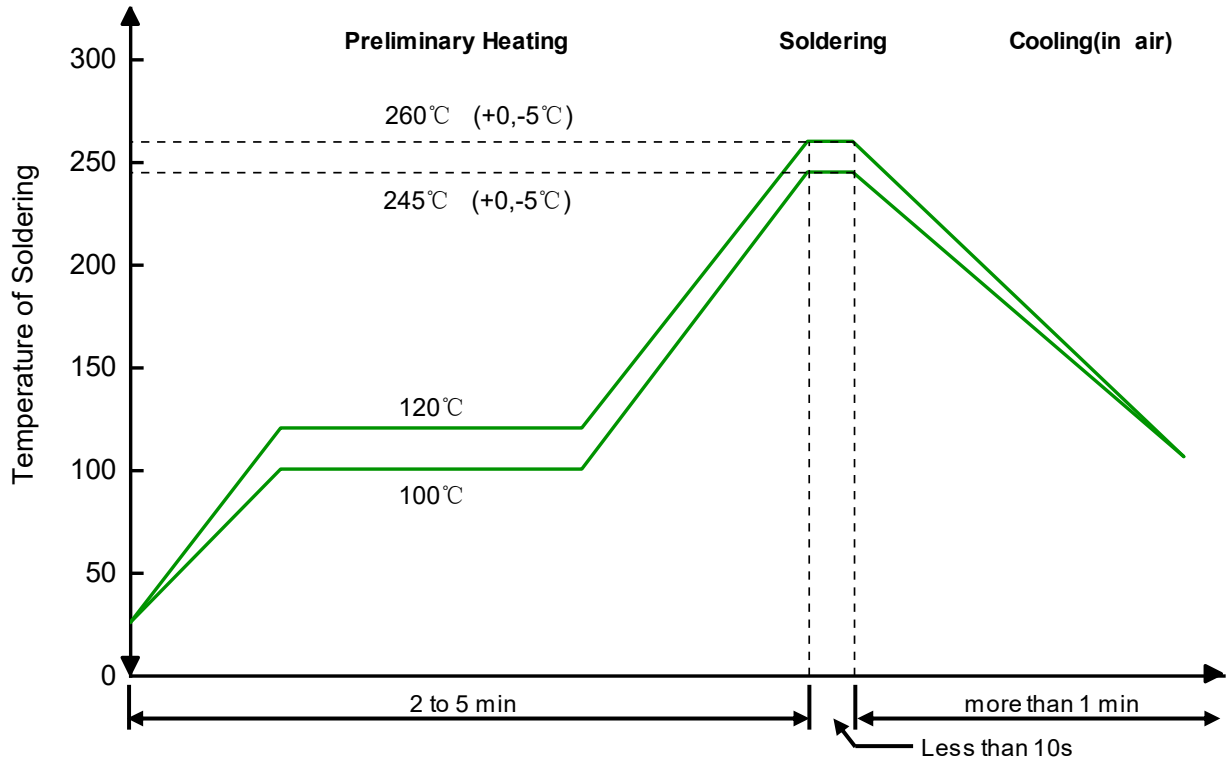
Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	-40	V
Collector- Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-1500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C
Thermal resistance from junction to ambient	$R_{\theta JA}$	417	°C/W

Typical Characteristics



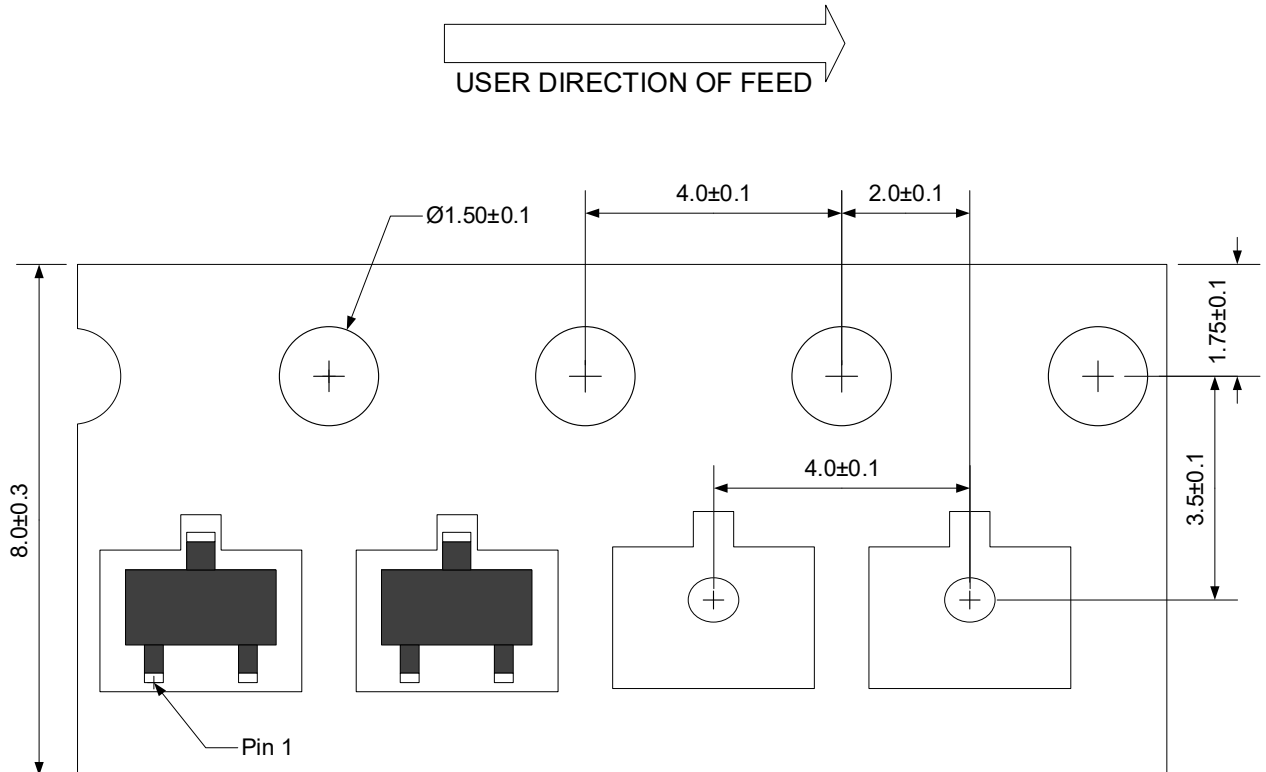


Solder Reflow Recommendation



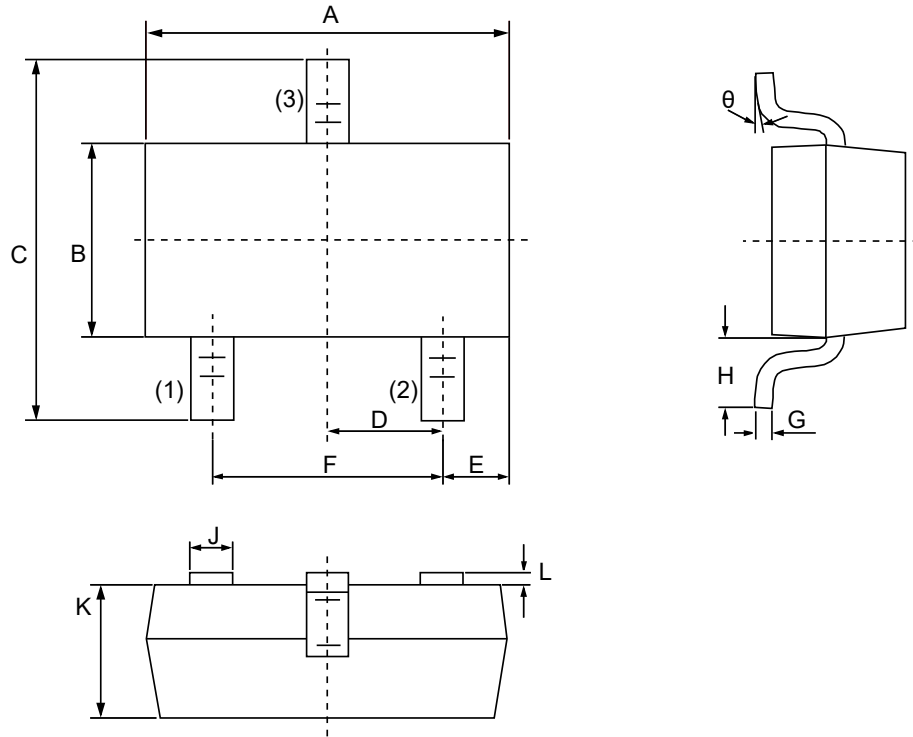
Remark: Pb free for 260°C; Pb for 245°C.

Load with information

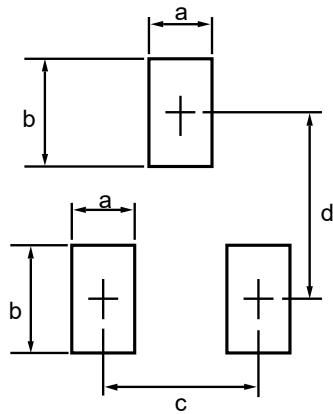


Unit:mm

Product dimension(SOT-23)

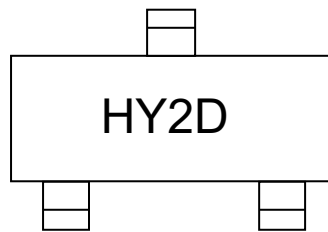


Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	2.80	3.00	0.1102	0.1197
B	1.20	1.40	0.0472	0.0551
C	2.10	2.50	0.0830	0.0984
D	0.89	1.02	0.0350	0.0401
E	0.45	0.60	0.0177	0.0236
F	1.78	2.04	0.0701	0.0807
G	0.085	0.177	0.0034	0.0070
H	0.45	0.60	0.0180	0.0236
J	0.37	0.50	0.0150	0.0200
K	0.89	1.11	0.0350	0.0440
L	0.013	0.100	0.0005	0.0040
θ	0°	10°	0°	10°



Dim	Millimeters	
	MIN	MAX
a	--	0.7
b	--	1.2
c	--	2.04
d	--	2.2


Marking information



Ordering information

Device	Package	Reel	Shipping
PT23T8550	SOT-23	7"	3000 / Tape & Reel


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