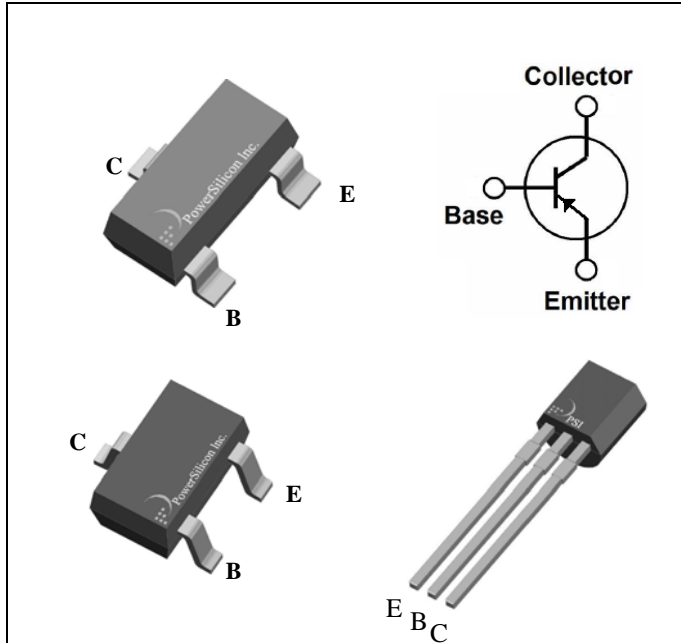


PLASTIC-ENCAPSULATE TRANSISTORS PNP Silicon



FEATURES

- High DC Current Gain
- Low Collector-Emitter Saturation Voltage

MECHANICAL DATA

- Available in SOT-23, SOT-323, TO-92 Package
- Solderability : MIL-STD-202, Method 208
- Full RoHS Compliance

ORDERING INFORMATION

PART NUMBER	PACKAGE	SHIPPING	MARKING CODE
SS8550□-△-T3	SOT-23	Tape Reel	Y2
SS8550□-△-3T3	SOT-323	Tape Reel	
SS8550□-△-T92	TO-92	Bulk	SS8550 LS yww
SS8550□-△-T92B	TO-92	Tape Box	

Notes:

1. □: none is for Lead Free package;
"G" is for Halogen Free package.
2. △: Rank Of h_{FE} ; See Classification Of h_{FE}
3. Marking Code: yww: y: Year code; ww: Week code.

THERMAL DATA

PARAMETER	SYMBOL	SOT-323	SOT-23	TO-92	UNIT
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	625	357	120	°C/W
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	-	90	20	°C/W

Notes:

4. $R_{\theta JA}$ is the sum of the junction-to-case and case-to-ambient thermal resistance where the case thermal reference is defined as the solder mounting surface of the drain pins. $R_{\theta JC}$ is guaranteed by design while $R_{\theta CA}$ is determined by the user's board design. The value of $R_{\theta JA}$ is measured with device mounted on 1 in² FR-4 board with 2 oz copper.

ABSOLUTE MAXIMUM RATINGS
 $T_A = 25^\circ\text{C}$, unless otherwise noted.

PARAMETER		SYMBOL	VALUES	UNIT
Collector-Emitter Voltage		V_{CEO}	-25	V
Collector-Base Voltage		V_{CBO}	-40	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current-Continuous		I_C	-1.5	A
Power Dissipation	TO-92	P_C	1	W
	SOT-23		0.3	
	SOT-323		0.2	
Junction Temperature		T_J	150	$^\circ\text{C}$
Storage Temperature		T_{stg}	-55 ~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS
 $T_A = 25^\circ\text{C}$, unless otherwise noted.

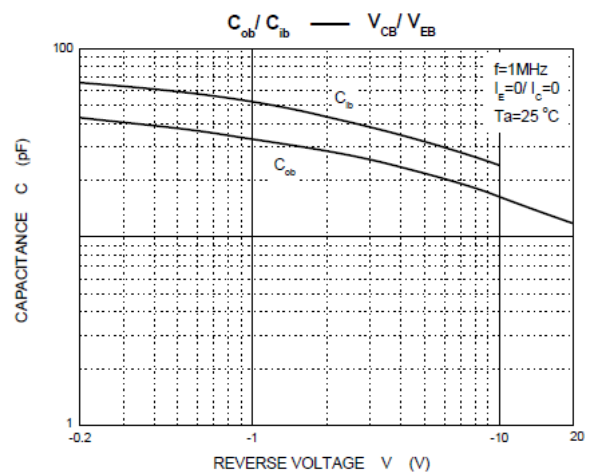
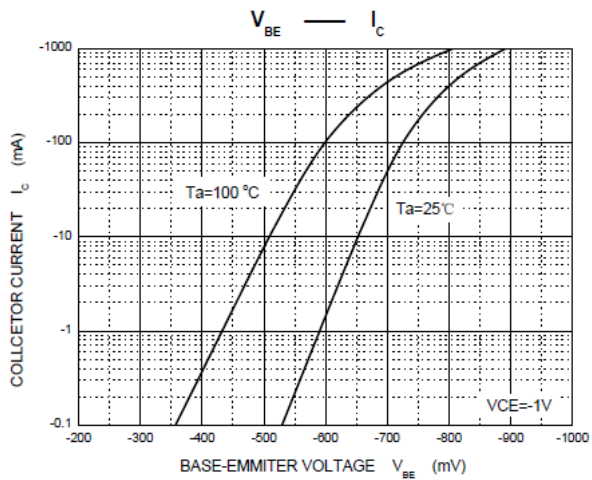
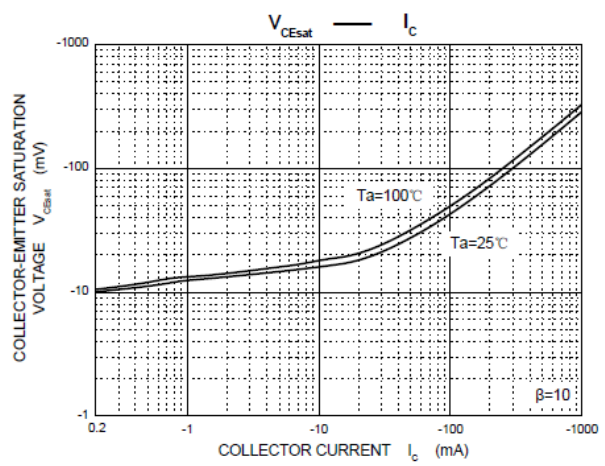
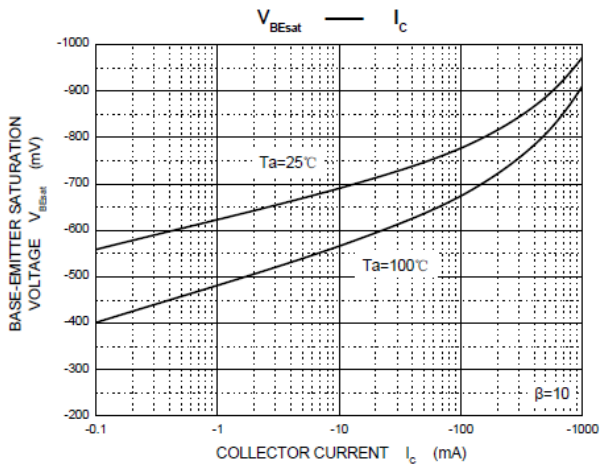
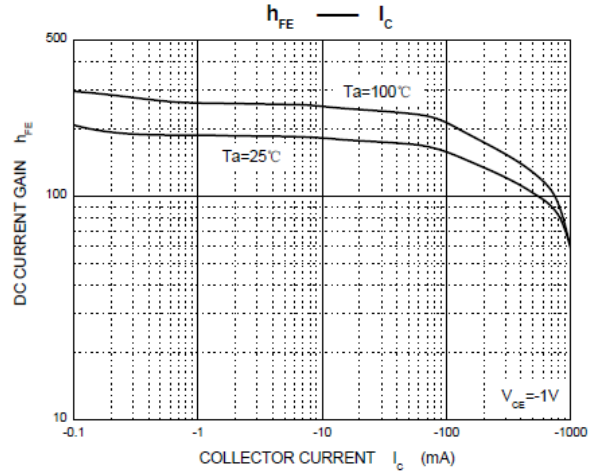
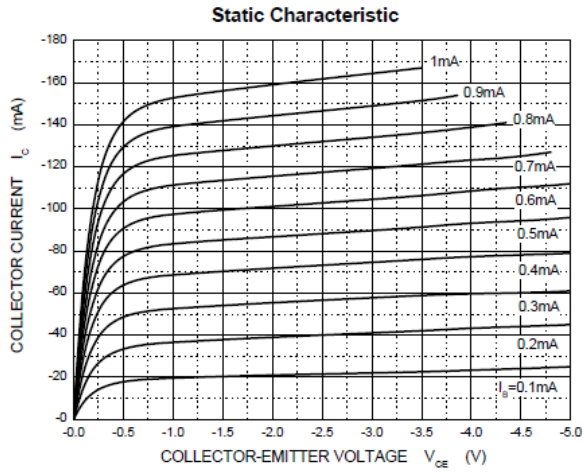
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS						
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -0.1\text{mA}, I_B = 0$	-25			V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -0.1\text{mA}, I_E = 0$	-40			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -0.1\text{mA}, I_C = 0$	-5			V
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	μA
Collector Cut-off Current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$			-0.1	μA
Collector Cut-off Current	I_{CEO}	$V_{CE} = -20\text{V}, I_B = 0$			-0.1	μA
ON CHARACTERISTICS						
DC Current Gain	TO-92	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	85		400
	SOT-23, SOT-323			120		400
		$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -800\text{mA}$	40		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -800\text{mA}, I_B = -80\text{mA}$			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -800\text{mA}, I_B = -80\text{mA}$			-1.2	V
SMALL-SIGNAL CHARACTERISTICS						
Transition Frequency	f_T	$I_C = -50\text{mA}, V_{CE} = -10\text{V}, f = 30\text{MHz}$	100			MHz
Out Capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$			20	pF

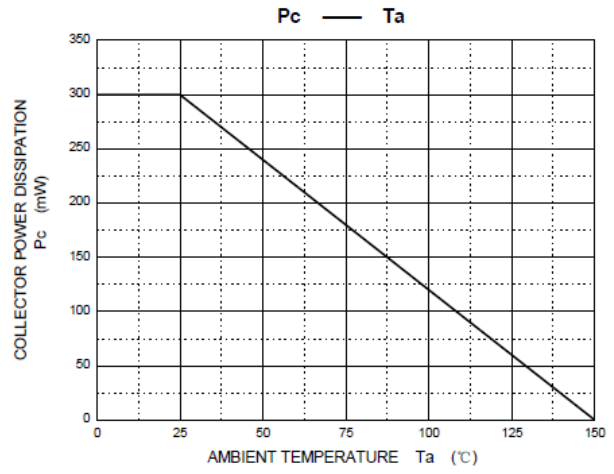
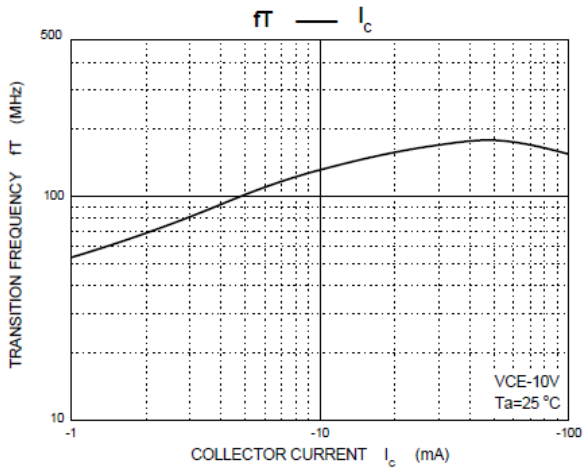
CLASSIFICATION OF $h_{FE(1)}$

SOT-23, SOT-323 RANK	L	H	J
$h_{FE(1)}$ RANGE	120~200	200~350	300~400

TO-92 RANK	B	C	D	D3
$h_{FE(1)}$ RANGE	85~160	120~200	160~300	300~400

TYPICAL PERFORMANCE CHARACTERISTICS





PHYSICAL DIMENSION

Unit : Inch (Millimeter)

