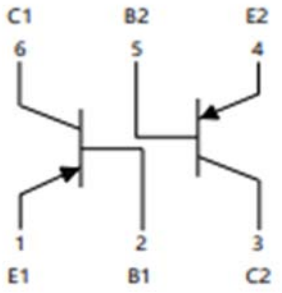
Dual PNP Small Signal Transistor





Features

- Moisture sensitivity level 1
- Halogen free and RoHS compliant
- Surface mount package ideally suited for automatic insertion

Application

- Signal amplification
- Switching circuit

Mechanical data

- **Package：** SOT-363S
- **Terminals：** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ **Maximum Ratings** (T_a=25℃ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Device marking code				5Ft
Collector-base voltage	V_{CBO}	V	I_C =-10uA,I_E=0	-80
Collector-emitter voltage	V_{CEO}	V	I_C =-10mA,I_B=0	-65
Emitter-base voltage	V_{EBO}	V	I_E=-10uA,I_C=0	-5
Collector current	I_C	mA		-100
Power dissipation	P_D	mW		200
Operation junction temperature	T_J	℃		-55 to +150
Storage temperature	T_{STG}	℃		-55 to +150

■ Electrical Characteristics (Ta=25℃ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	I_C=-10μA,I_E=0	-80		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	I_C=-10mA,I_B=0	-65		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	I_E=-10μA,I_C=0	-5		
Collector cut-off current	I_{CBO}	nA	V_{CB}=-30V,I_B=0			-15
Emitter-base cutoff current	I_{EBO}	nA	V_{EB}=-5V, I_C=0			-100
DC current gain	h_{FE}		V_{CE}=-5V,I_C=-2mA	110		
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	I_C=-10mA,I_B=-0.5mA			-0.3
			I_C=-100mA,I_B=-5mA			-0.65
Base-emitter saturation voltage	$V_{BE(sat)}$	V	I_C=-10mA,I_B=-0.5mA			-0.85
Base-emitter voltage	V_{BE}	V	V_{CE}=-5V,I_C=-2mA	-0.6		-0.75
Transition frequency	f_T	MHz	V_{CE}=-5V,I_C=-10mA,f=100MHz	100		

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	℃/W	625
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	℃/W	500

Note:

（1）Device mounted on PCB, single-sided copper, with standard footprint

■Characteristics

Fig 1：Static Characteristics

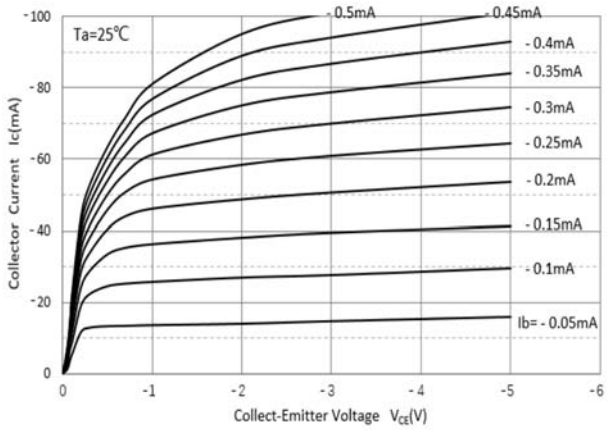


Fig 2：DC Current Gain Characteristics

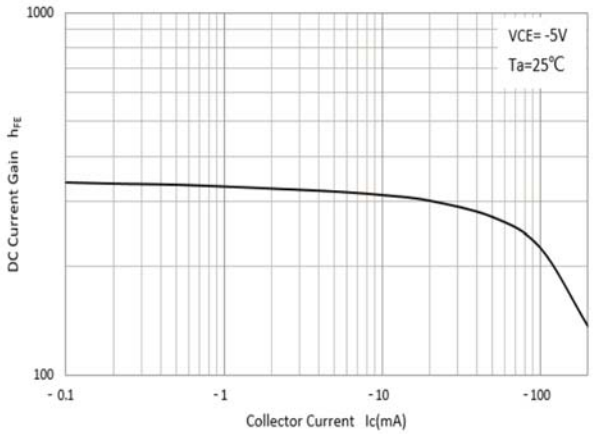


Fig 3：Collector-Emitter Saturation Voltage

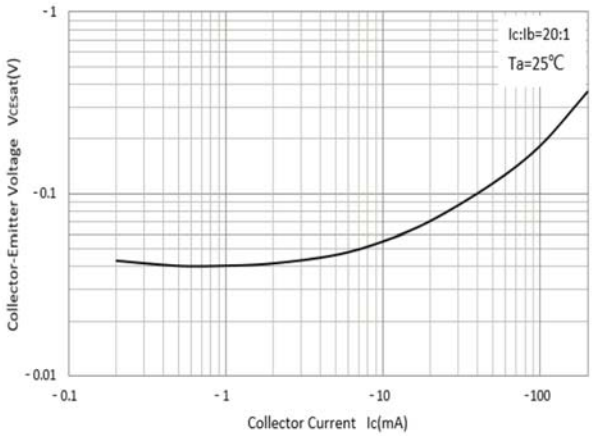


Fig 4：Base-Emitter Saturation Voltage

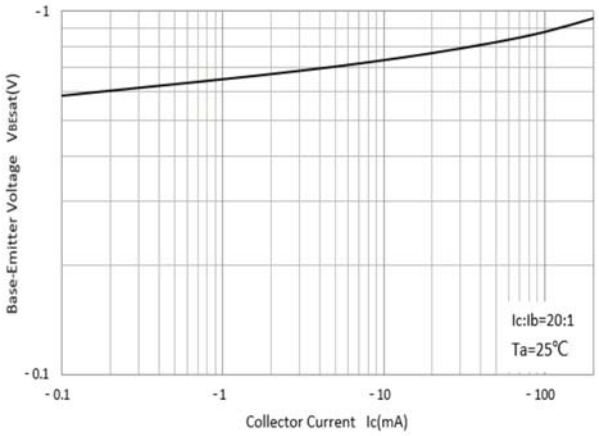


Fig 5：Base-Emitter On Voltage

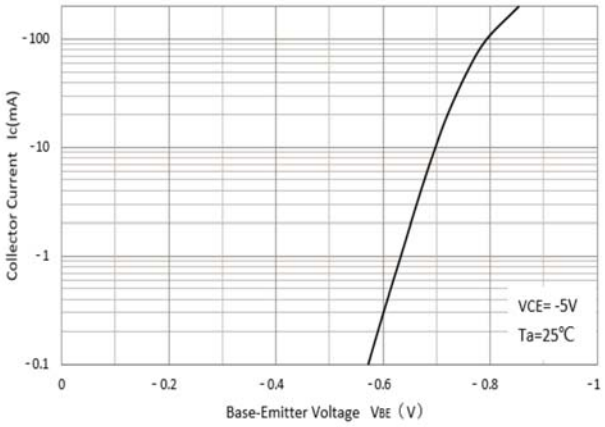


Fig 6：Cob/Cib-V_{CB}/V_{EB}

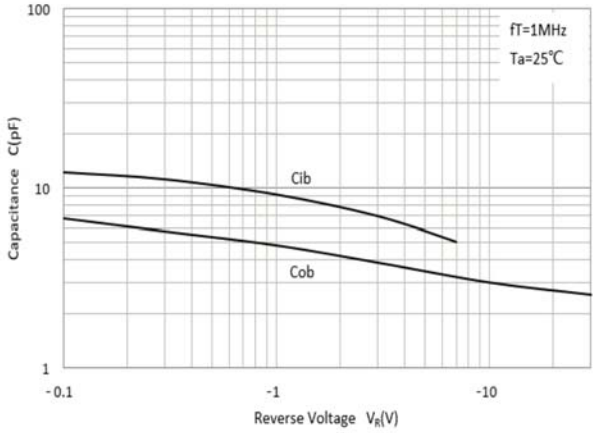
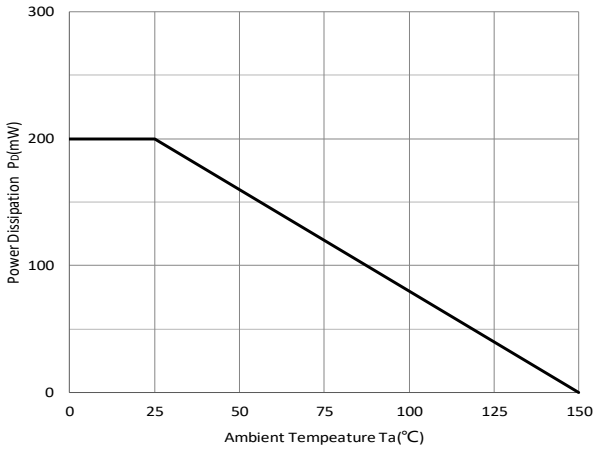


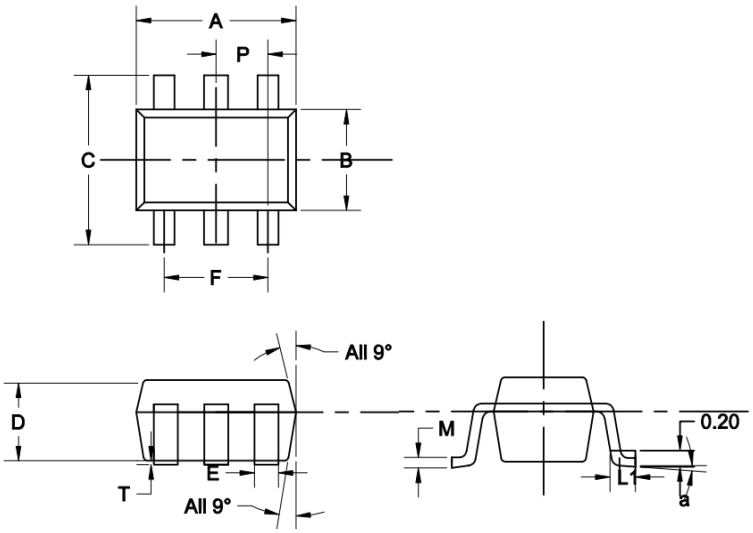
Fig 7：P_D-Ta Curve



■Ordering Information

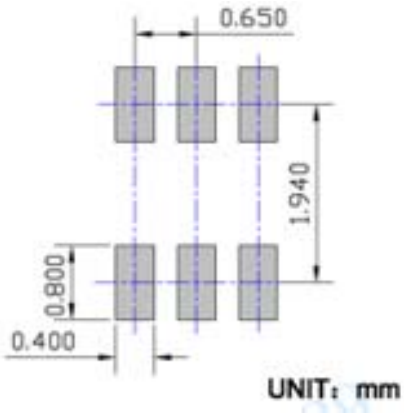
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BC856SS	F2	Approximate 0.009	3000	30000	120000	7” reel

■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
E	0.15	0.25	0.35
B	1.15	1.25	1.35
C	2.00	2.10	2.20
P		0.650BSC	
A	1.80	2.00	2.20
T	0.00	0.05	0.100
D	0.90	0.95	1.00
L1	0.20	0.30	0.40
a		4°±4°	
M	0.10	0.15	0.25

■ Suggested Pad Layout



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