CHINA BASE INTERNATIONAL

SOT-323

BC856W-BC860W

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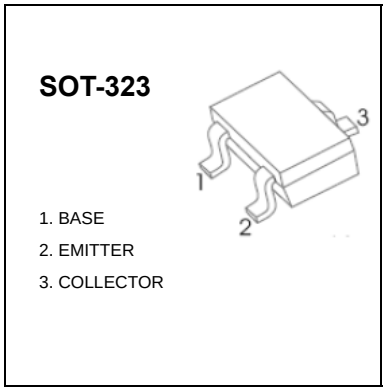
Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications



Absolute Maximum Ratings (T_a = 25 °C)

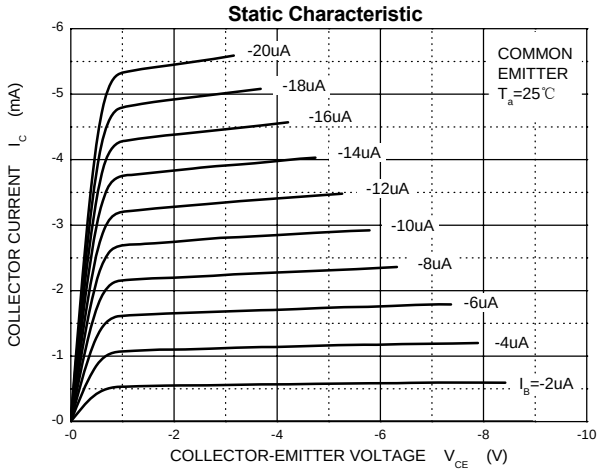
Parameter		Symbol	Value	Unit
Collector Base Voltage	BC856W	$-V_{CBO}$	80	V
	BC857W , BC860W	$-V_{CBO}$	50	V
	BC858W , BC859W	$-V_{CBO}$	30	V
Collector Emitter Voltage	BC856W	$-V_{CEO}$	65	V
	BC857W , BC860W	$-V_{CEO}$	45	V
	BC858W , BC859W	$-V_{CEO}$	30	V
Emitter Base Voltage		$-V_{EBO}$	5	V
Collector Current		$-I_C$	100	mA
Peak Collector Current		$-I_{CM}$	200	mA
Power Dissipation		P_{tot}	150	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	- 65 to + 150	°C

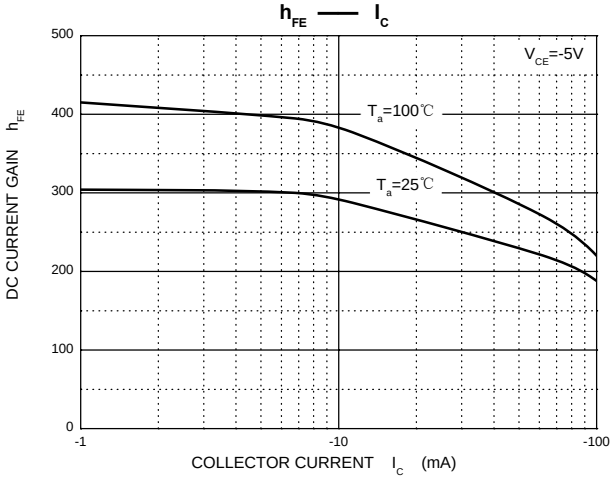
MARKING CODE

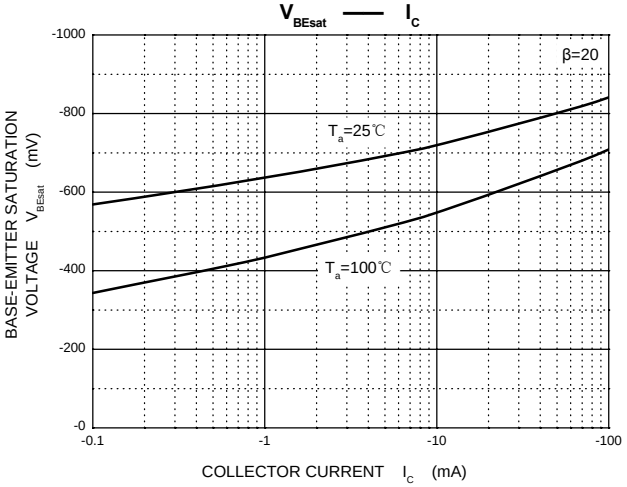
TYPE	856AW	856BW	856CW	857AW	857BW	857CW	858AW	858BW	858CW
MARKING	3A	3B	3C	3E	3F	3G	3J	3K	3L
TYPE	859AW	859BW	859CW	860AW	860BW	860CW			
MARKING	4A	4B	4C	4E	4F	4G			

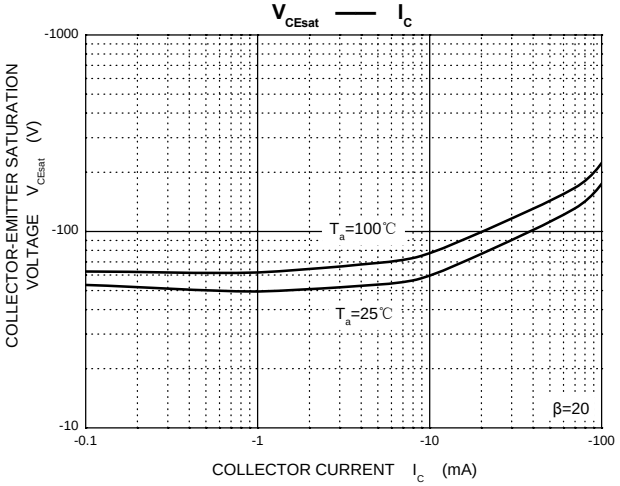
Characteristics at T_a = 25 °C

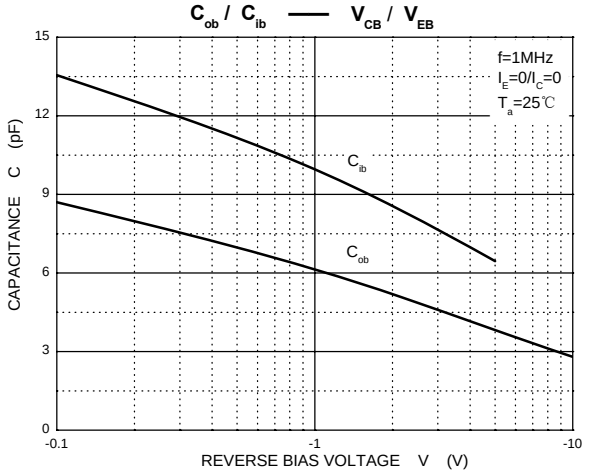
Parameter		Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE}$ = 5 V, $-I_C$ = 2 mA	Current Gain Group A B C	h_{FE} h_{FE} h_{FE}	110 200 420	220 450 800	- - -
Collector Base Cutoff Current at $-V_{CB}$ = 30 V		$-I_{CBO}$	-	15	nA
Collector Base Breakdown Voltage at $-I_C$ = 10 µA	BC856W BC857W, BC860W BC858W, BC859W	$-V_{(BR)CBO}$ $-V_{(BR)CBO}$ $-V_{(BR)CBO}$	80 50 30	- - -	V V V
Collector Emitter Breakdown Voltage at $-I_C$ = 10 µA	BC856W BC857W, BC860W BC858W, BC859W	$-V_{(BR)CES}$ $-V_{(BR)CES}$ $-V_{(BR)CES}$	80 50 30	- - -	V V V
Collector Emitter Breakdown Voltage at $-I_C$ = 10 mA	BC856W BC857W, BC860W BC858W, BC859W	$-V_{(BR)CEO}$ $-V_{(BR)CEO}$ $-V_{(BR)CEO}$	65 45 30	- - -	V V V
Emitter Base Breakdown Voltage at $-I_E$ = 1 µA		$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C$ = 10 mA, $-I_B$ = 0.5 mA at $-I_C$ = 100 mA, $-I_B$ = 5 mA		$-V_{CE(sat)}$ $-V_{CE(sat)}$	- -	0.3 0.65	V V
Base Emitter On Voltage at $-I_C$ = 2 mA, $-V_{CE}$ = 5 V at $-I_C$ = 10 mA, $-V_{CE}$ = 5 V		$-V_{BE(on)}$ $-V_{BE(on)}$	0.6 -	0.75 0.82	V V
Current Gain Bandwidth Product at $-V_{CE}$ = 5 V, $-I_C$ = 10 mA, f = 100 MHz		f_T	100	-	MHz
Output Capacitance at $-V_{CB}$ = 10 V, f = 1 MHz		C_{ob}	-	6	pF

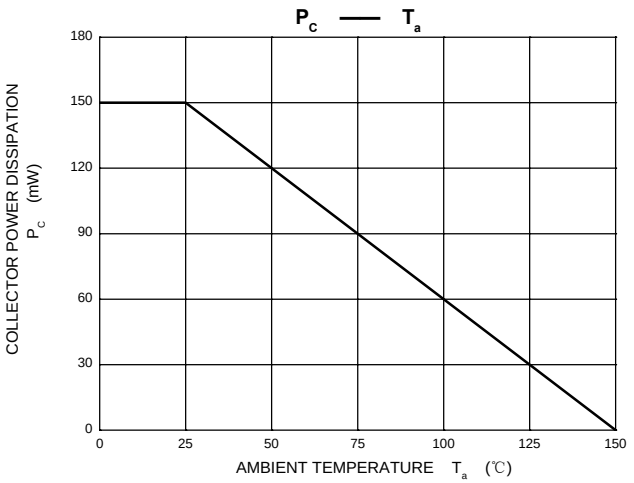






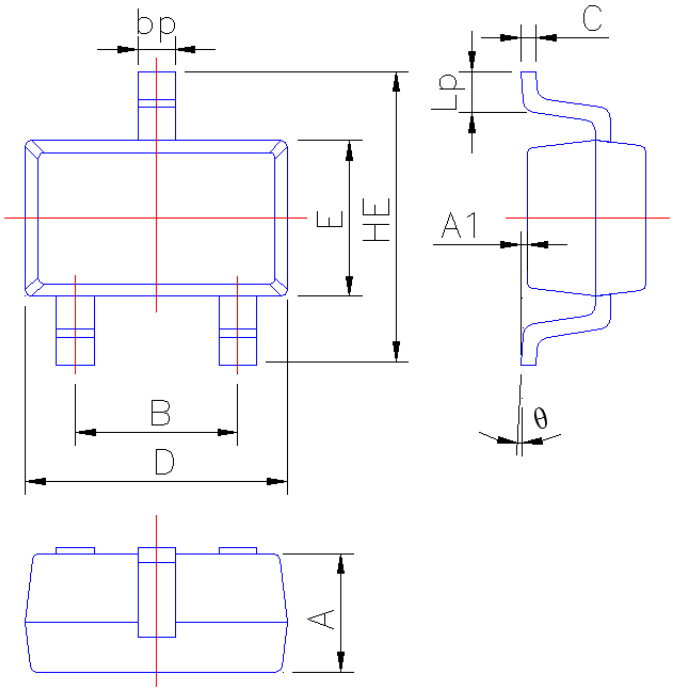






PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-323**



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.00
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.45
C	0.09	0.15
D	2.00	2.20
E	1.15	1.35
HE	2.15	2.55
Lp	0.25	0.46
θ	0°	6°