



**BC856AW/BW
BC857AW/BW/CW
BC858AW/BW/CW**

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Ideally Suited for Automatic Insertion
- Complementary PNP Silicon Types Available
- For Switching and AF Amplifier Applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating temperature : -65°C to +150°C
- Storage temperature : -65°C to +150°C
- Marking: BC856AW---3A ; BC856BW---3B
BC857AW---3E ; BC857BW---3F ; BC857CW---3G
BC858AW---3J ; BC858BW---3K ; BC858CW---3L

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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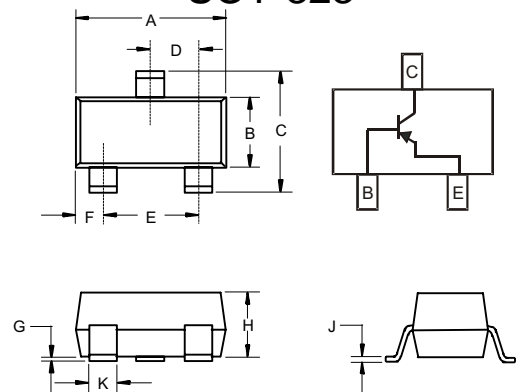
OFF CHARACTERISTICS

$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-10\mu A_{dc}, I_E=0$)			
	BC856AW,BW	-80	---	Vdc
	BC857AW,BW,CW	-50	---	
	BC858AW,BW,CW	-30	---	
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=-10mA_{dc}, I_B=0$)			
	BC856AW,BW	-65	---	Vdc
	BC857AW,BW,CW	-45	---	
	BC858AW,BW,CW	-30	---	
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=-1\mu A_{dc}, I_C=0$)	-5	---	Vdc
I_{CBO}	Collector Cut-off Current) ($V_{CB}=-30V, I_E=0$)	---	-15	nAdc
$H_{FE(1)}$	DC Current Gain($V_{CE}=-5V, I_C=-2mA$)			
	BC856AW,BC857AW,BC858AW	125	250	---
	BC856BW,BC857BW,BC858BW	220	475	
	BC857CW,BC858CW	420	800	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-100mA, I_B=-5mA$)	---	-0.65	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=-100mA, I_B=-5mA$)	---	-1.10	Vdc
f_T	Transition Frequency ($V_{CE}=-5V, I_C=-10mA, f=100MHz$)	100	---	MHz
NF	Noise Figure ($V_{CE}=-5V, I_C=-200\mu A, R_s=2k\Omega, f=1kHz$)	---	10	dB
C_{CBO}	Collector-Base Capacitance ($V_{CB}=-10V, f=1.0kHz$)	---	4.5	pF
P_d	Power Dissipation	---	150	mW
R_{JA}	Thermal Resistance, Junction to Ambient	---	625	°C/W
I_C	Collector Current - Continuous	---	-100	mA

Note 1: Transistor mounted on an FR4 printed-circuit board

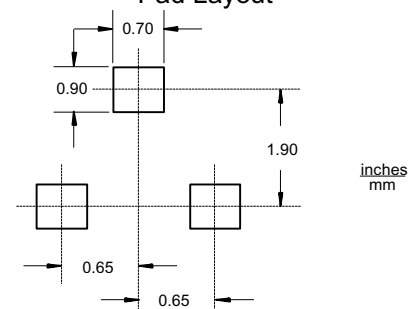
**PNP
General Purpose
Transistors**

SOT-323



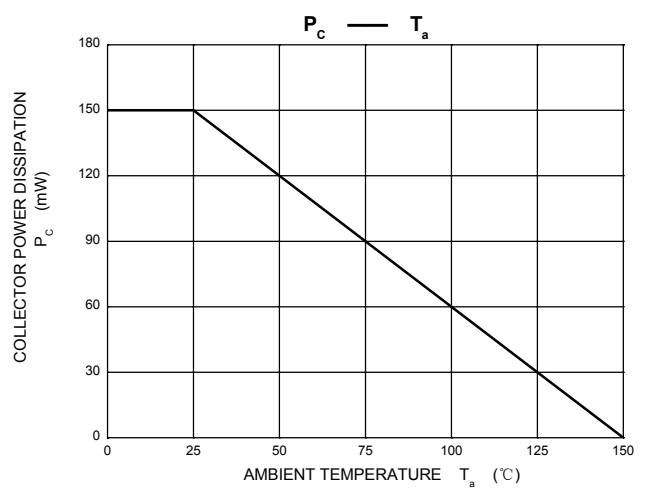
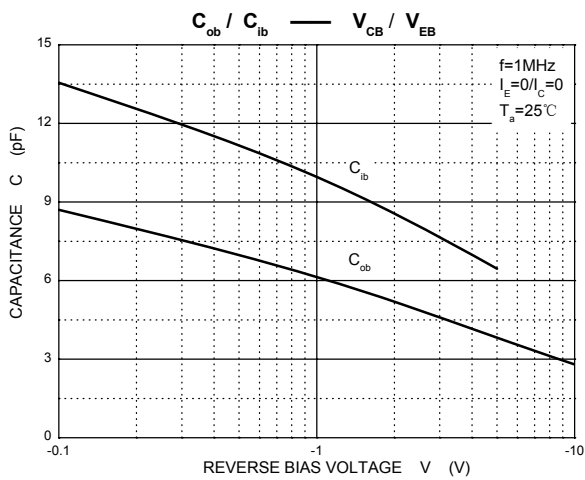
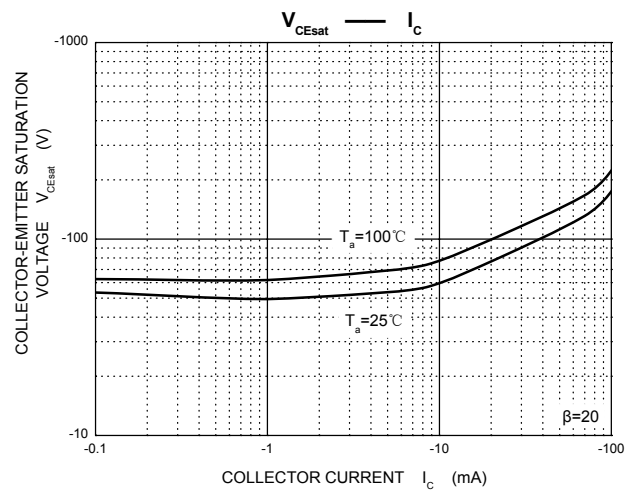
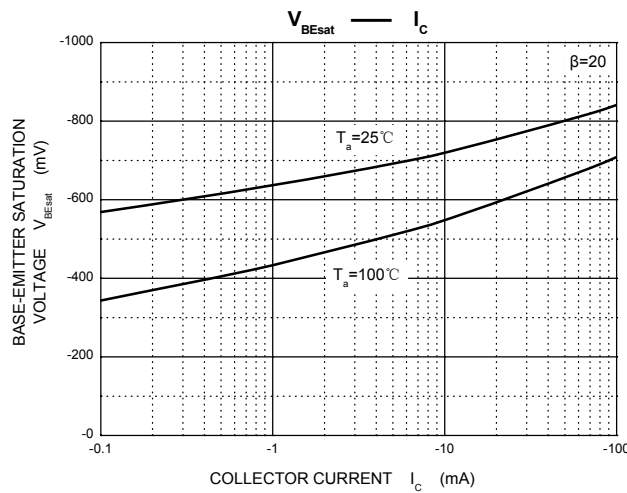
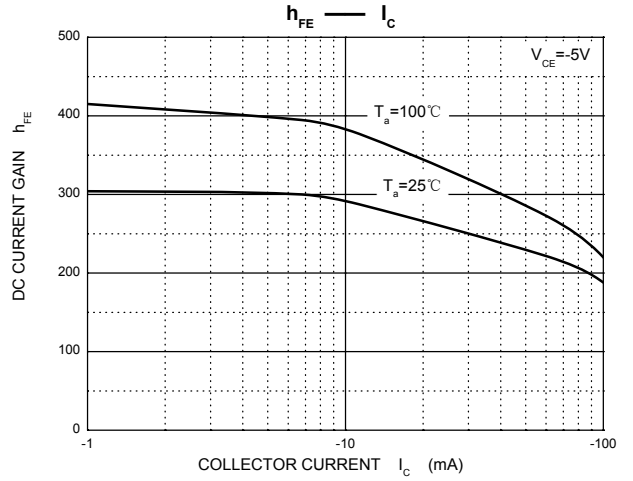
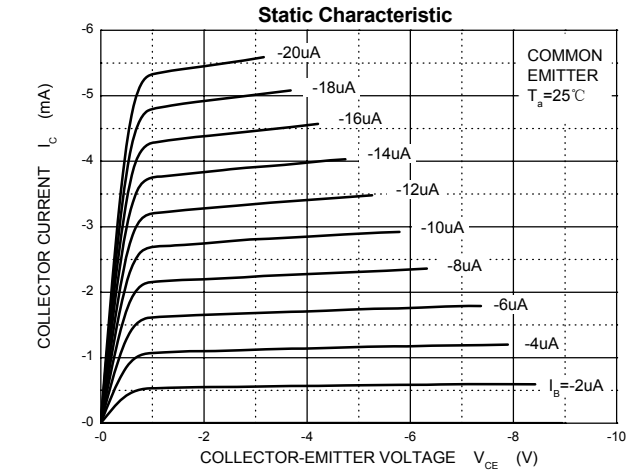
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

**Suggested Solder
Pad Layout**



BC856A/BW;BC857A/B/CW;BC858A/B/CW

Typical Characteristics





Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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