



Micro Commercial Components

Micro Commercial Components  
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 CA 91311  
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**BC856AW/BW  
 BC857AW/BW/CW  
 BC858AW/BW/CW**

**Features**

- Ideally Suited for Automatic Insertion
- Complementary PNP Silicon Types Available
- For Switching and AF Amplifier Applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating

**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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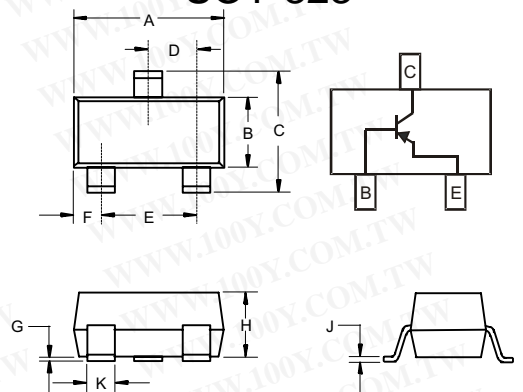
**OFF CHARACTERISTICS**

V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =10μAdc, I <sub>E</sub> =0)			
	BC856AW,BW	---	80	Vdc
	BC857AW,BW,CW BC858AW,BW,CW	---	50 30	
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =10mAdc, I <sub>B</sub> =0)			
	BC856AW,BW	---	65	Vdc
	BC857AW,BW,CW BC858AW,BW,CW	---	45 30	
V <sub>(BR)EBO</sub>	Collector-Emitter Breakdown Voltage (I <sub>E</sub> =10μAdc, I <sub>C</sub> =0)	---	5	Vdc
I <sub>CBO</sub>	Collector Cut-off Current (V <sub>CB</sub> =30v)	---	15	nAdc
	(V <sub>CB</sub> =30v, T <sub>A</sub> =150°C)	---	4	uAdc
H <sub>FE(1)</sub>	DC Current Gain (V <sub>CE</sub> =5V, I <sub>C</sub> =2mA)			
	BC856AW,BC857AW,BC858AW	125	250	---
	BC856BW,BC857BW,BC858CW	220	475	
	BC857CW,BC858CW	420	800	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =100mA, I <sub>B</sub> =5mA)	---	0.65	Vdc
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage (I <sub>C</sub> =100mA, I <sub>B</sub> =5mA)	---	1.10	Vdc
f <sub>T</sub>	Transition Frequency (V <sub>CE</sub> =5V, I <sub>C</sub> =10mA, f=100MHz)	100	200	MHz
NF	Noise Figure (V <sub>CE</sub> =5v, I <sub>C</sub> =200uA, R <sub>S</sub> =2kohm, f=1kHz)	---	10	dB
C <sub>CBO</sub>	Collector-Base Capacitance (V <sub>CB</sub> =10v, f=1.0kHz)	---	4.5	pF
Pd	Power Dissipation	---	150	mW
R <sub>JA</sub>	Thermal Resistance, Junction to Ambient	---	625	°C/W
I <sub>C</sub>	Collector Current - Continuous	---	100	mA

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

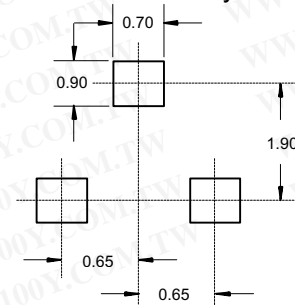
**PNP  
 General Purpose  
 Transistors**

**SOT-323**

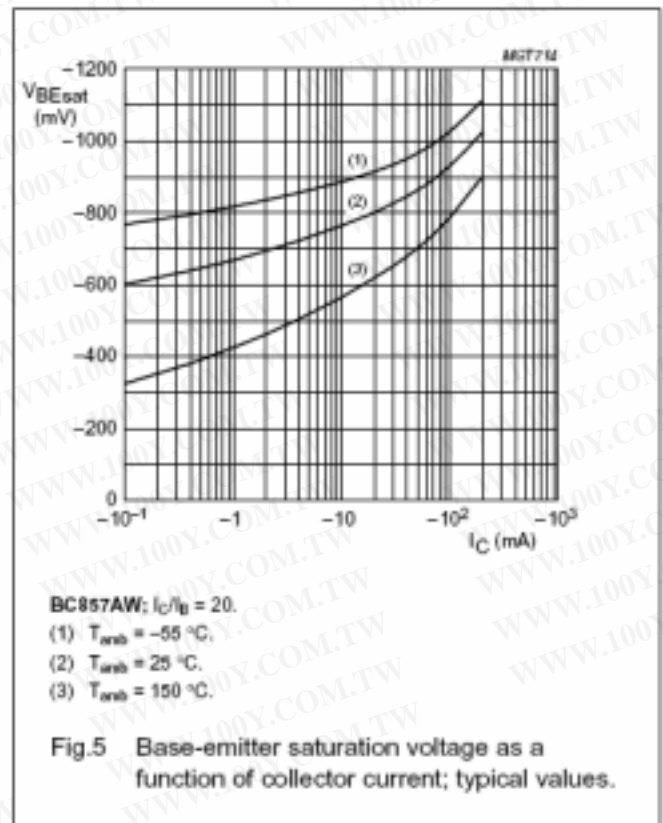
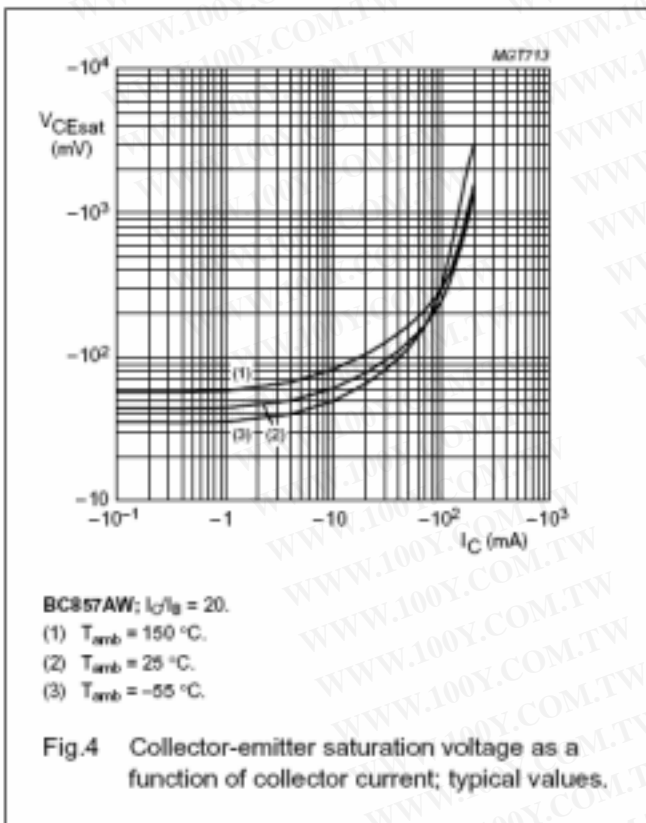
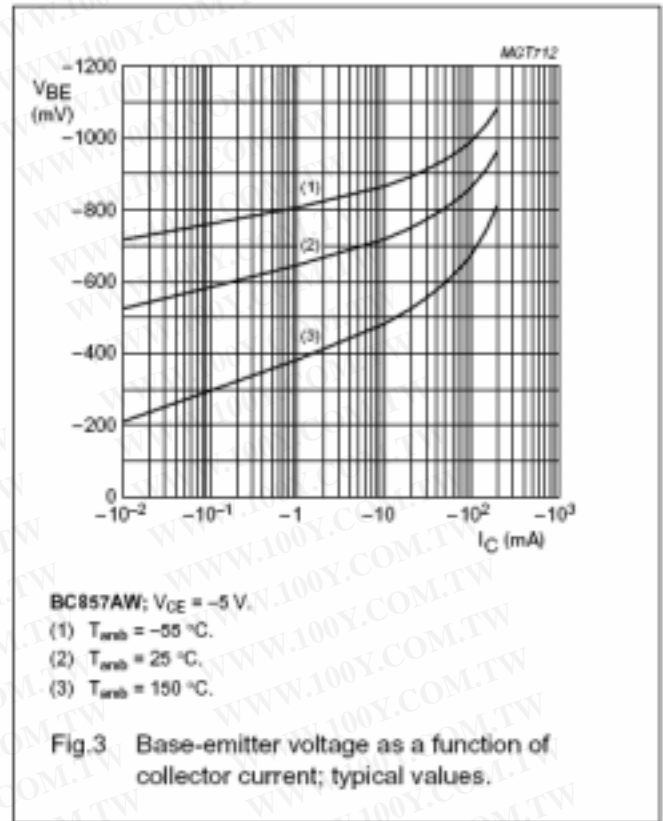
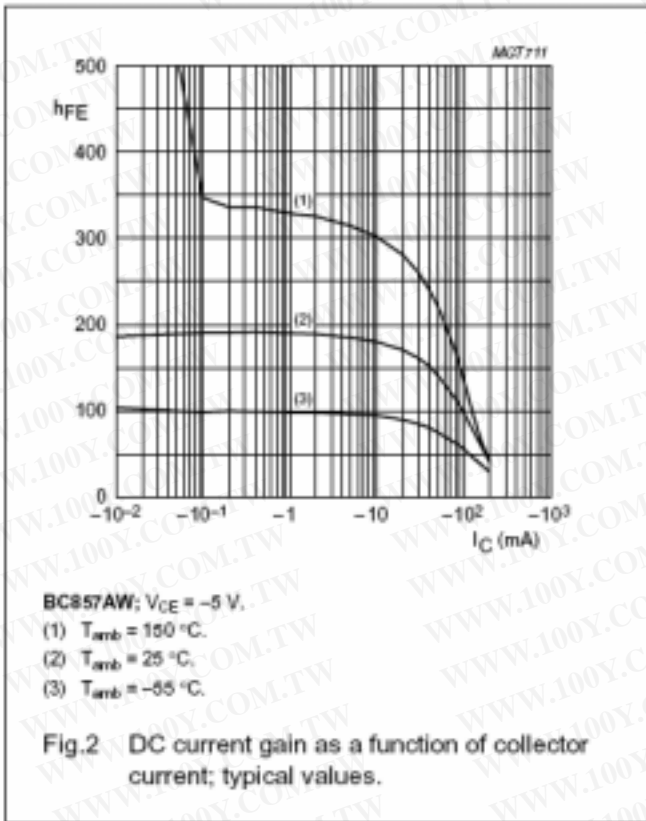


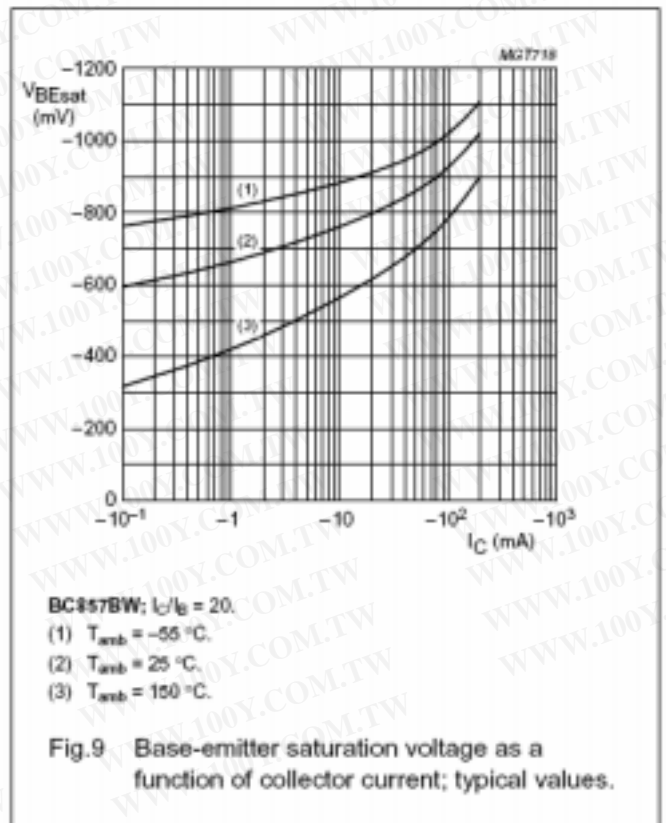
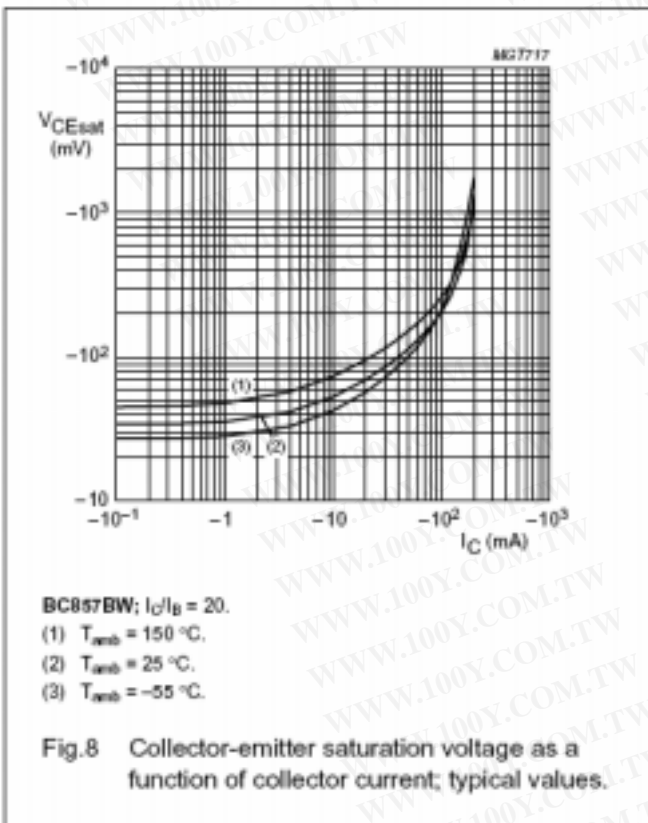
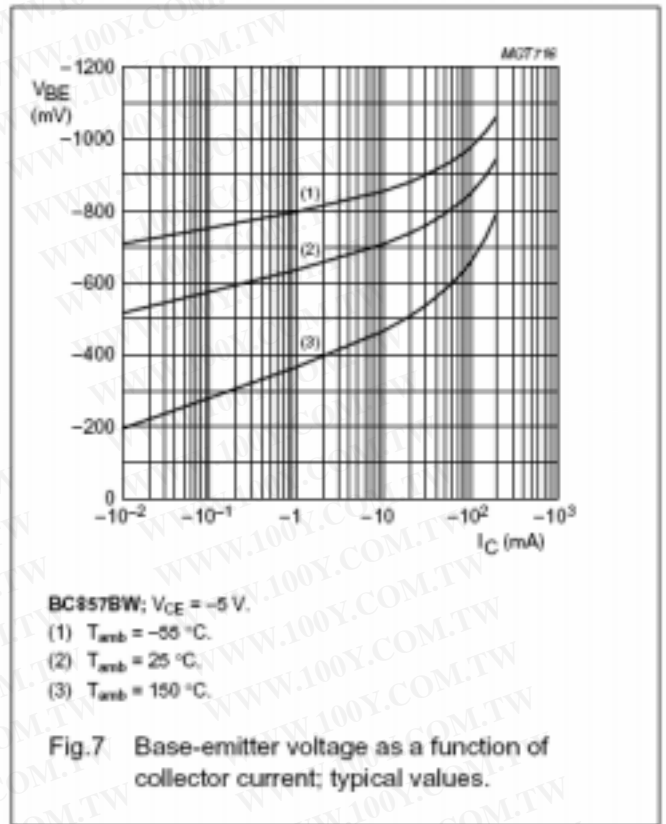
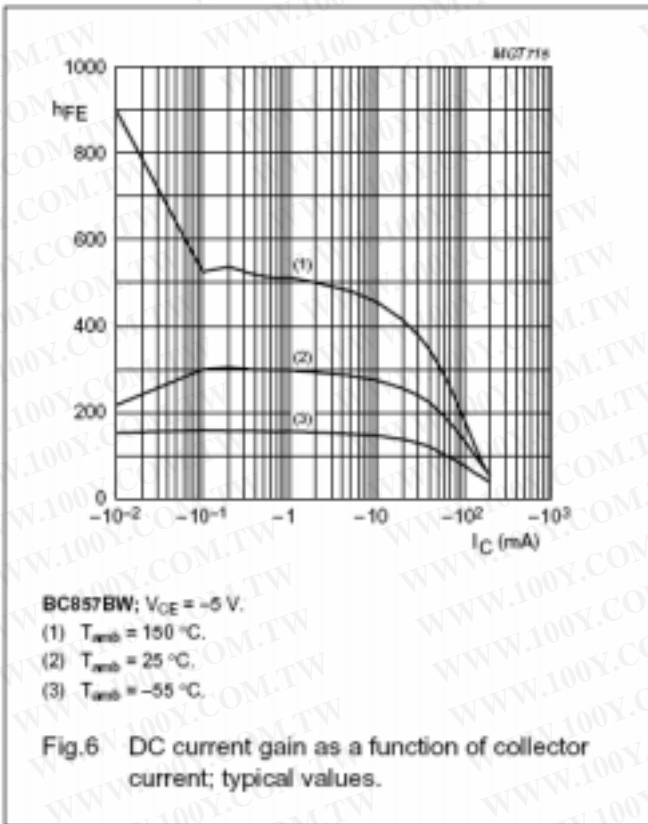
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

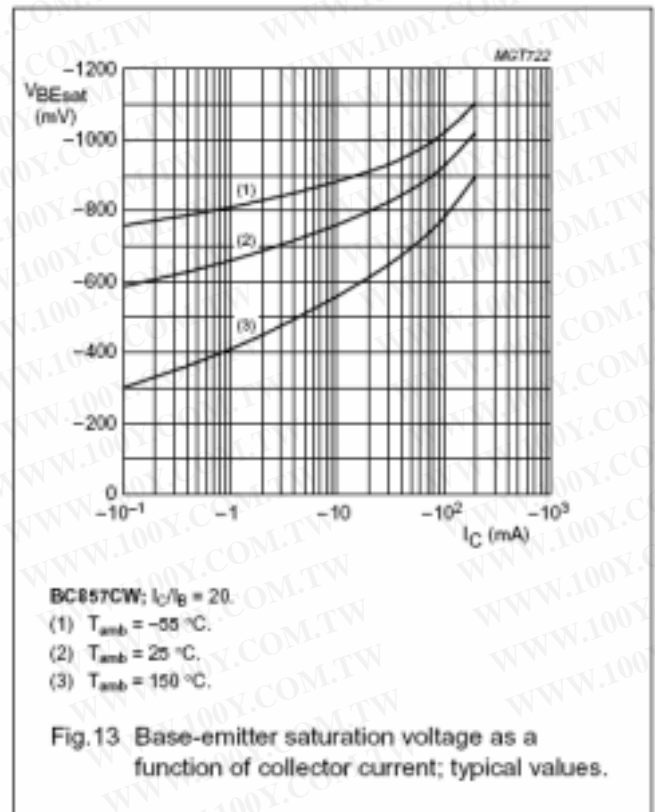
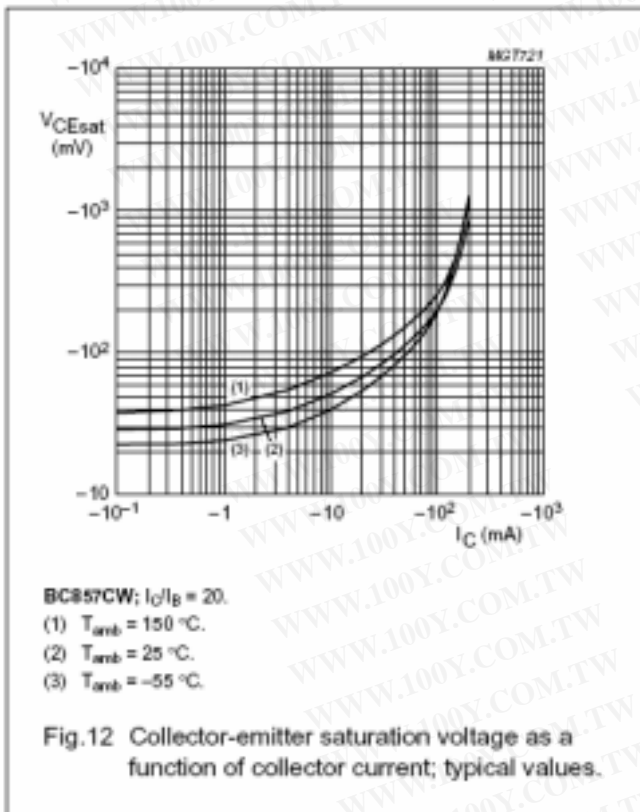
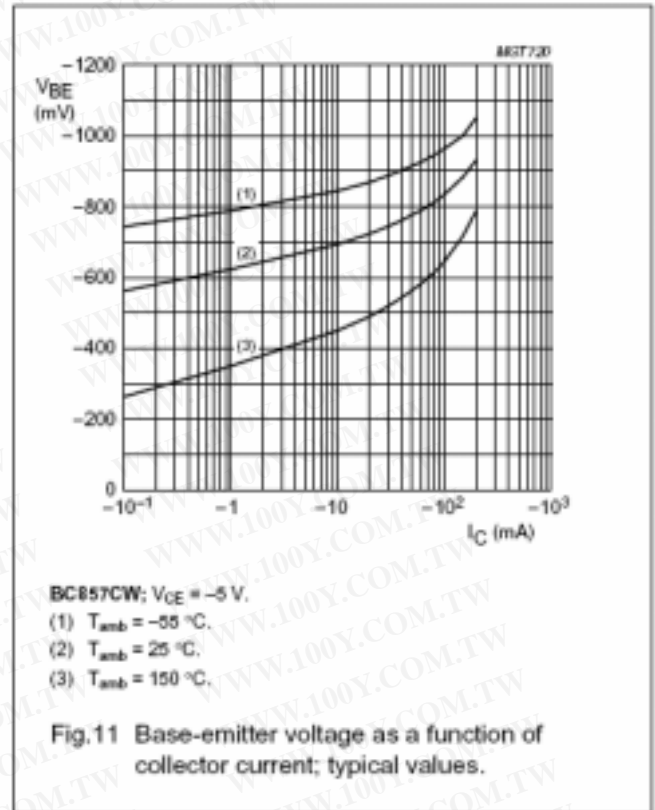
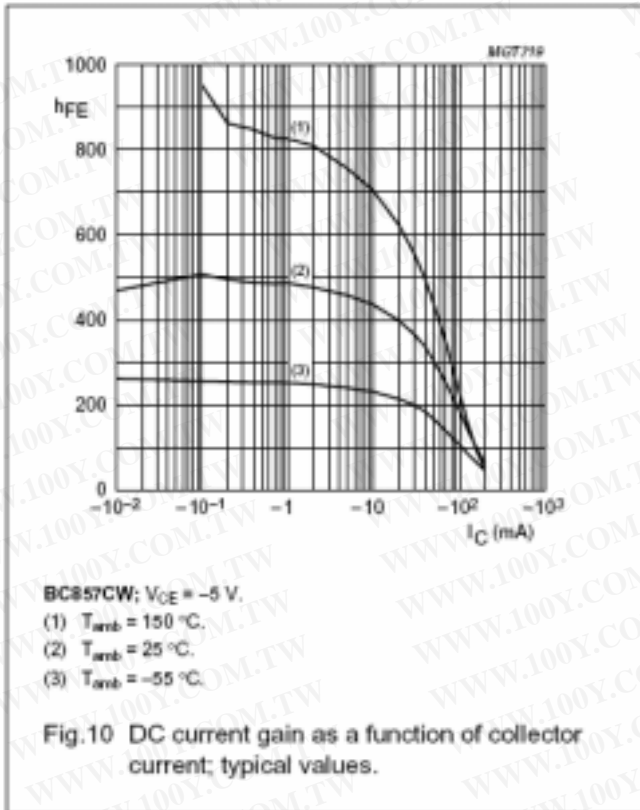
**Suggested Solder  
 Pad Layout**



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









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勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-54151736  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## Ordering Information

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

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