



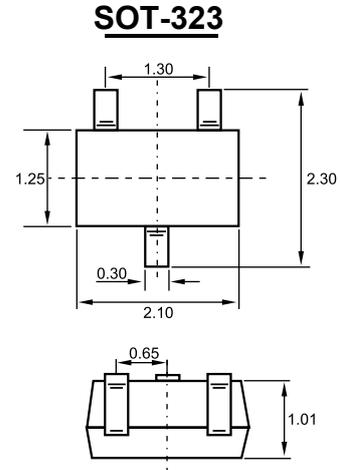
1. BASE
2. EMITTER
3. COLLECTOR

## Features

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

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage		
	BC856W	-80	V
	BC857W	-50	
	BC858W	-30	
V <sub>CEO</sub>	Collector-Emitter Voltage		
	BC856W	-65	V
	BC857W	-45	
	BC858W	-30	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current –Continuous	-0.1	A
P <sub>C</sub> *	Collector Power Dissipation	150	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-65-150	°C



Dimensions in inches and (millimeters)

## DEVICE MARKING

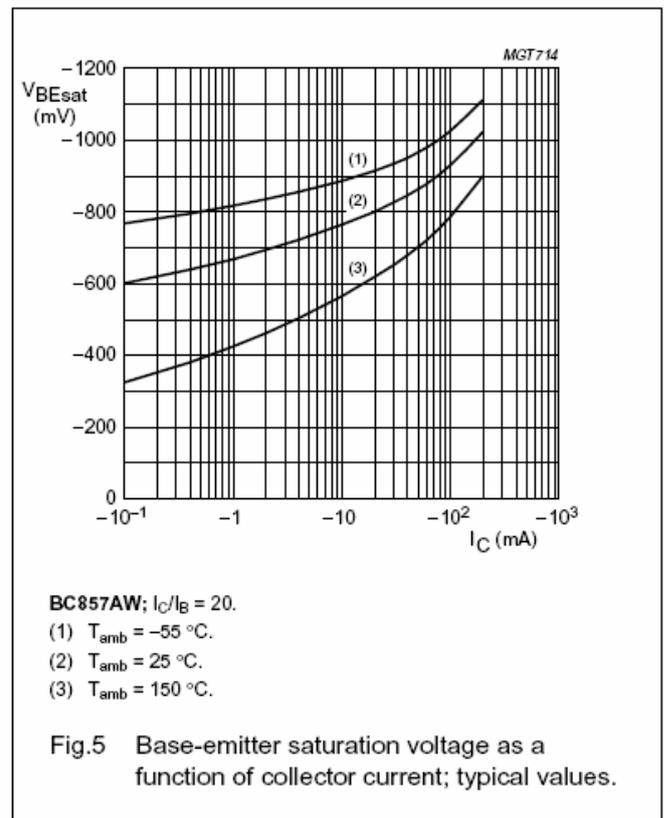
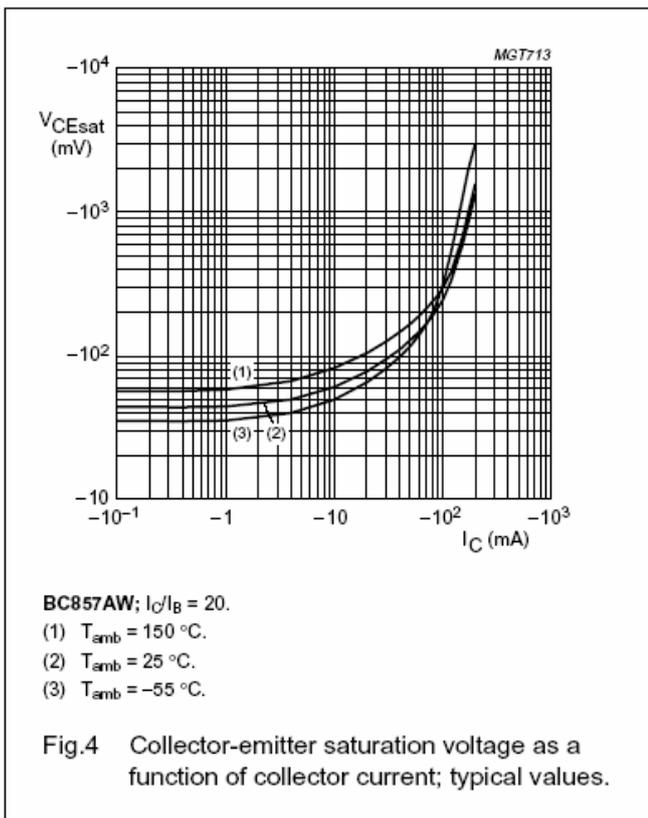
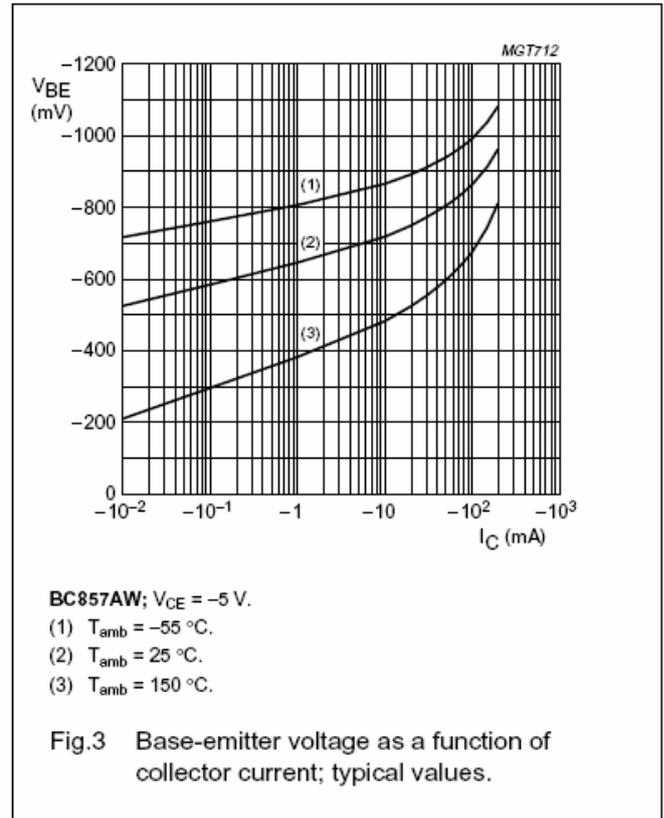
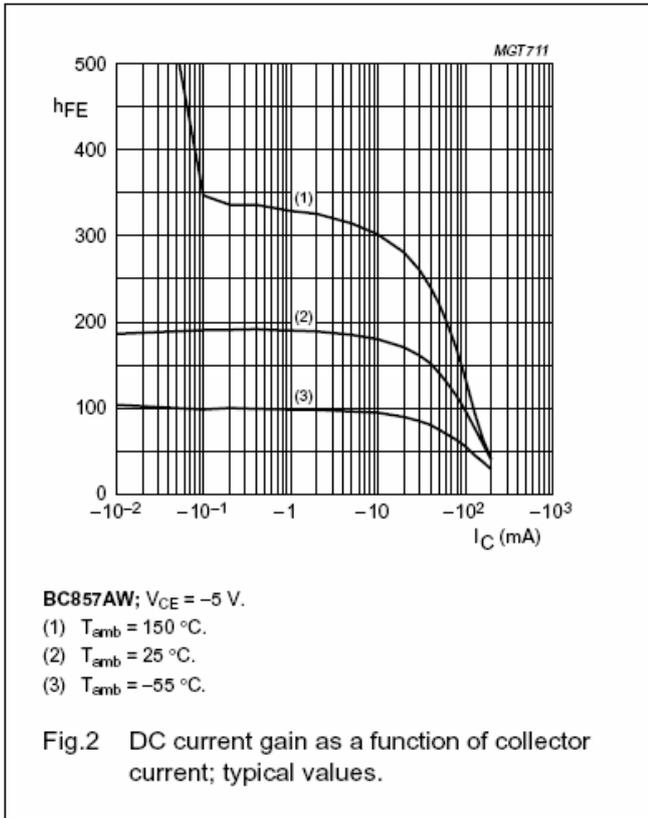
BC856AW=3A; BC856BW=3B;  
BC857AW=3E;BC857BW=3F;BC857CW=3G;  
BC858AW=3J; BC858BW=3K; BC858CW=3L

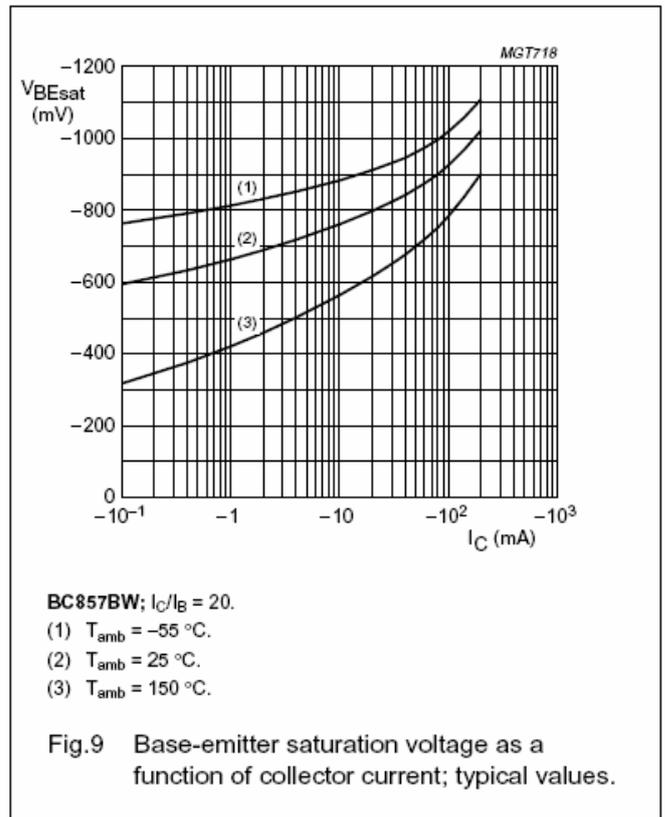
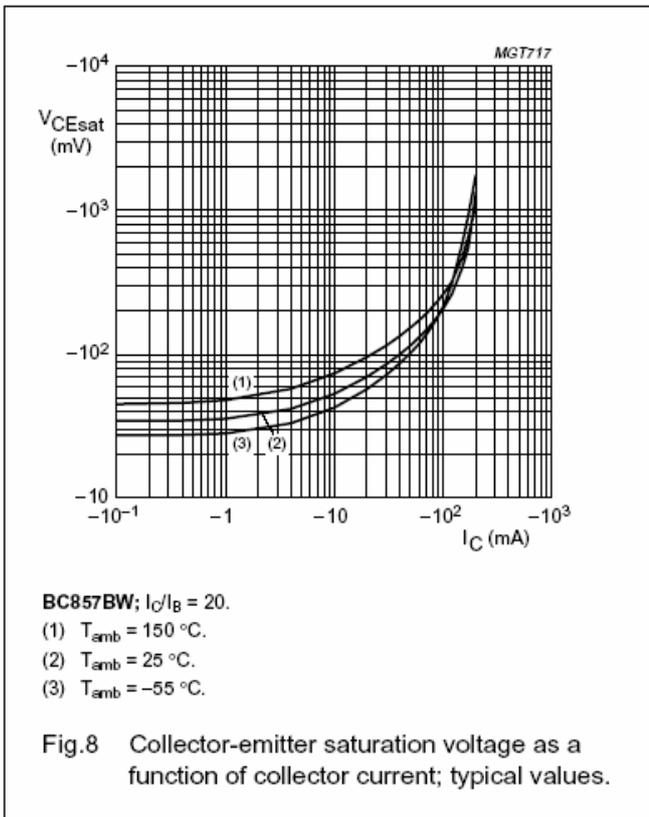
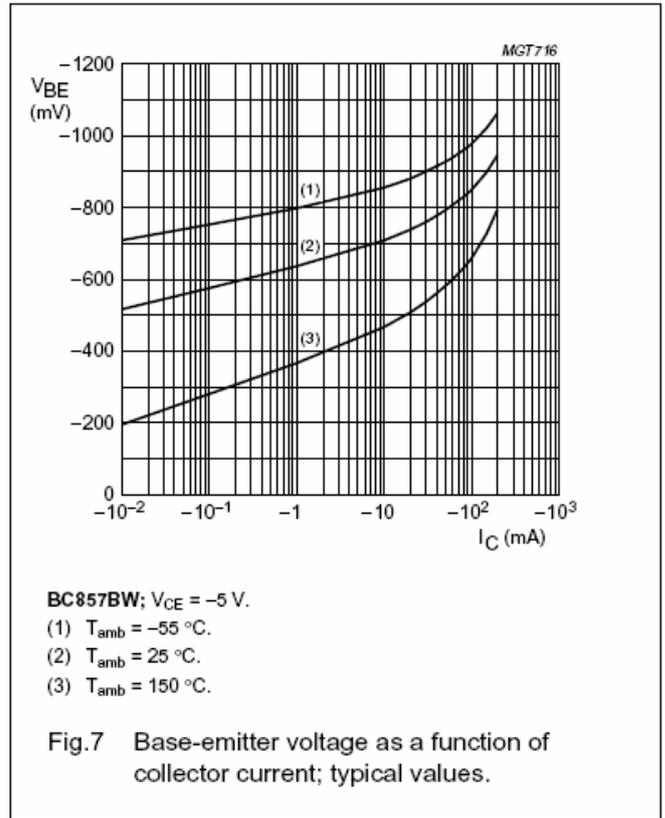
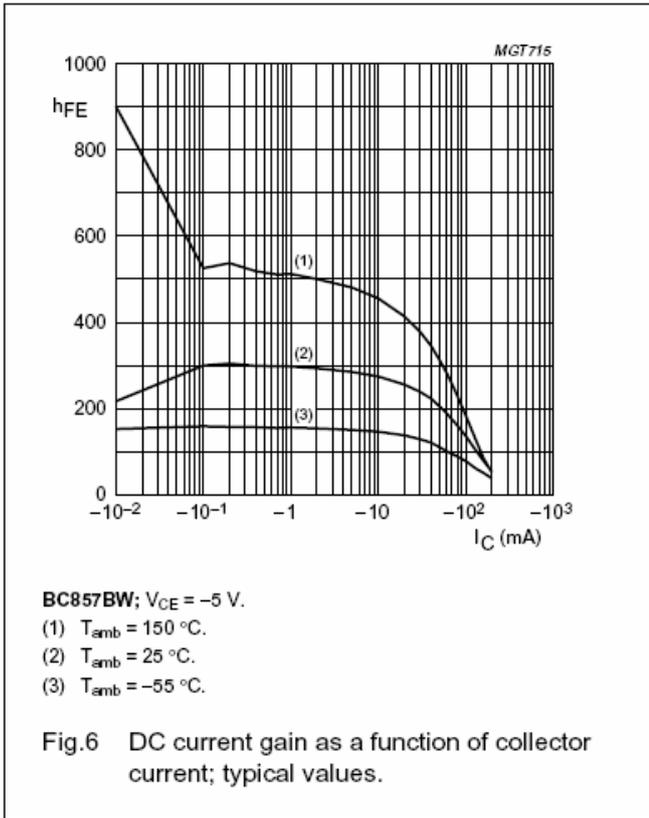

**ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)**

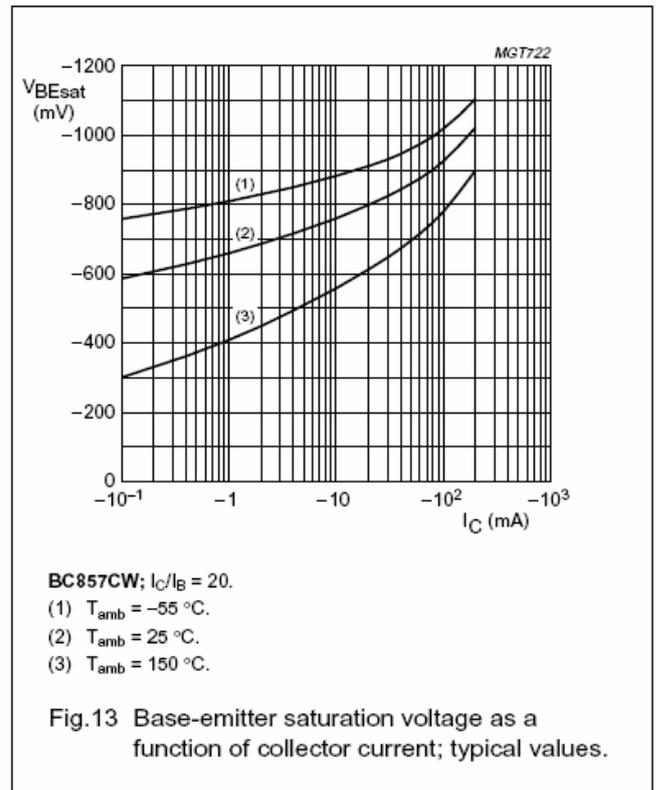
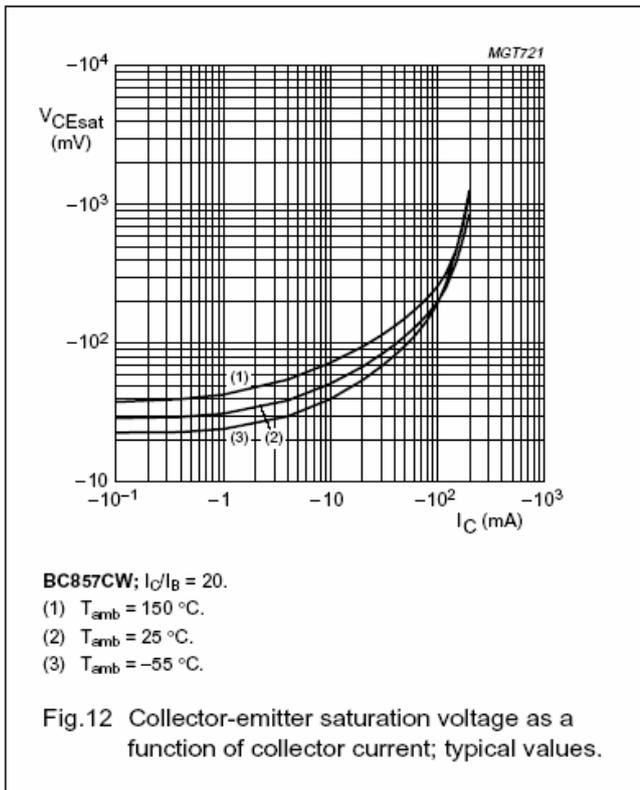
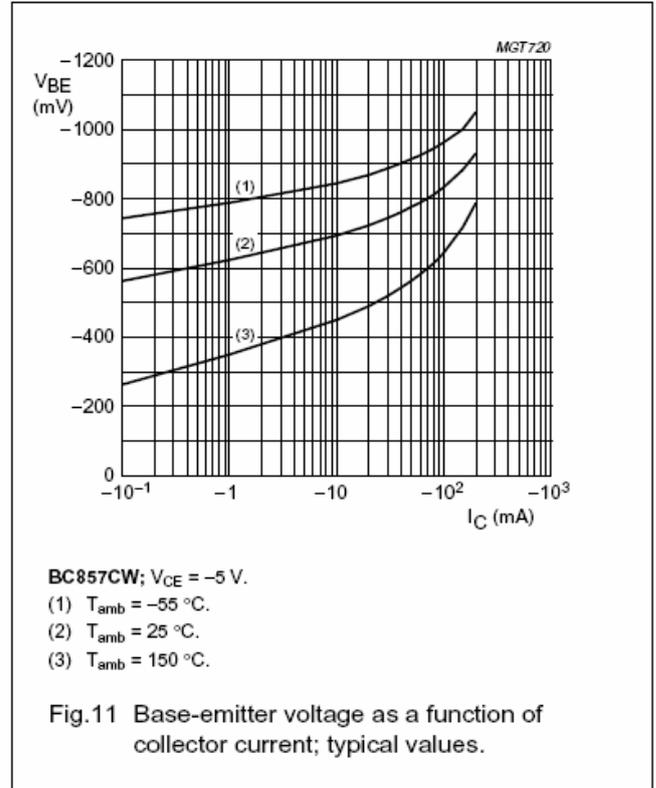
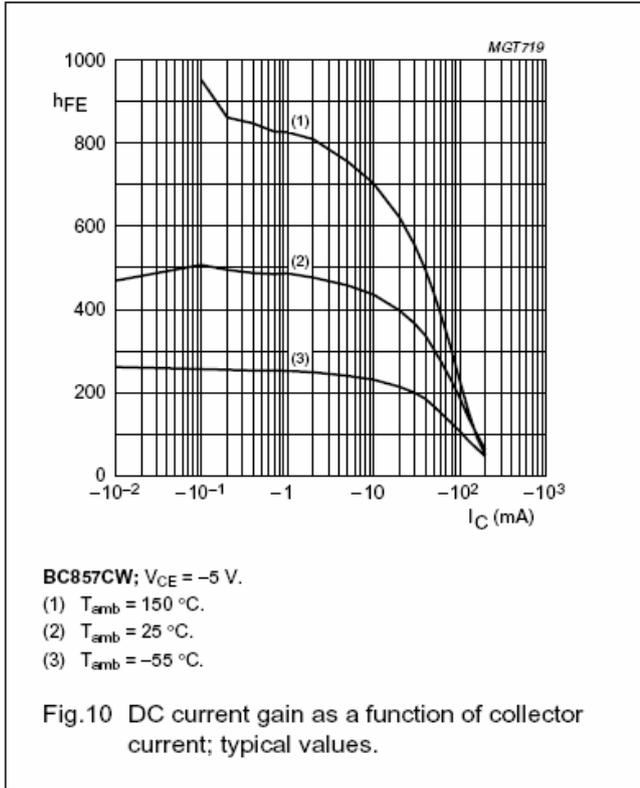
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BC856W BC857W BC858W	$V_{CBO}$	$I_C = -10\mu A, I_E = 0$	-80 -50 -30	V
Collector-emitter breakdown voltage	BC856W BC857W BC858W	$V_{CEO}$	$I_C = -10mA, I_B = 0$	-65 -45 -30	V
Emitter-base breakdown voltage		$V_{EBO}$	$I_E = -1\mu A, I_C = 0$	-5	V
Collector cut-off current		$I_{CBO}$	$V_{CB} = -30V, I_E = 0$		-15 nA
DC current gain	BC856AW, 857AW,858AW BC856BW, 857BW,858BW BC857CW,BC858CW	$h_{FE}$	$V_{CE} = -5V, I_C = -2mA$	125 220 420	250 475 800
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = -100mA, I_B = -5mA$		-0.65 V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C = -100mA, I_B = -5mA$		-1.1 V
Transition frequency		$f_T$	$V_{CE} = -5V, I_C = -10mA$ $f = 100MHz$	100	MHz
Collector capacitance		$C_{ob}$	$V_{CB} = -10V, f = 1MHz$		4.5 pF



## Typical Characteristics







Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT -323	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220