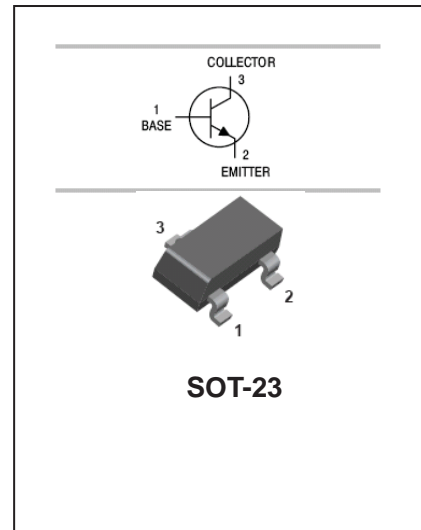


## NPN general purpose Transistor

## BC856/857/858

### FEATURES

- Low current.(max.100mA)
- Low voltage.(max.65v)



### APPLICATIONS

- General purpose switching and amplification.

### ORDERING INFORMATION

Type No.	Marking	Package Code
BC856A/B	3A/3B	SOT-23
BC857A/B/C	3E/3F/3G	SOT-23
BC858A/B/C	3J/3K/3L	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	BC856	-80
		BC857	-50
		BC858	-30
V <sub>CEO</sub>	Collector-Emitter Voltage	BC856	-65
		BC857	-45
		BC858	-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 Dissipation	250	mW
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-65~150	°C

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

## NPN general purpose Transistor

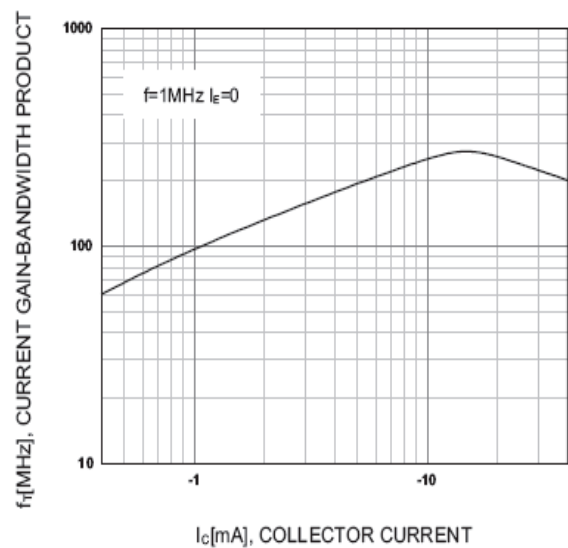
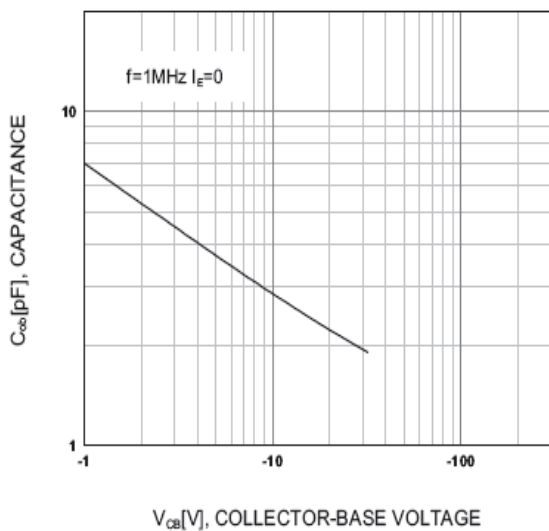
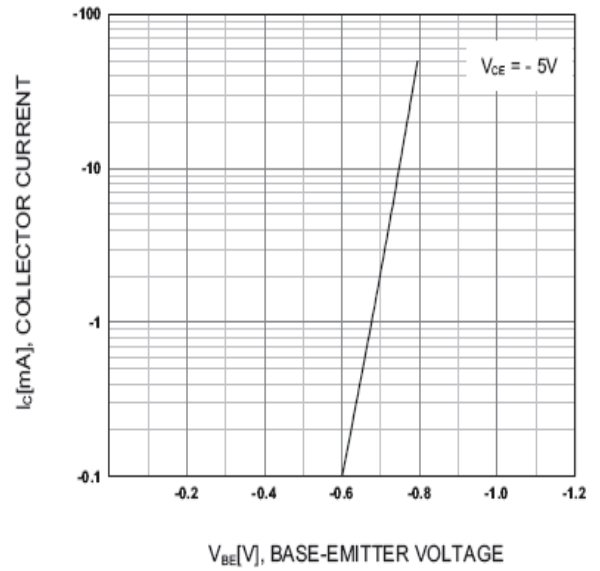
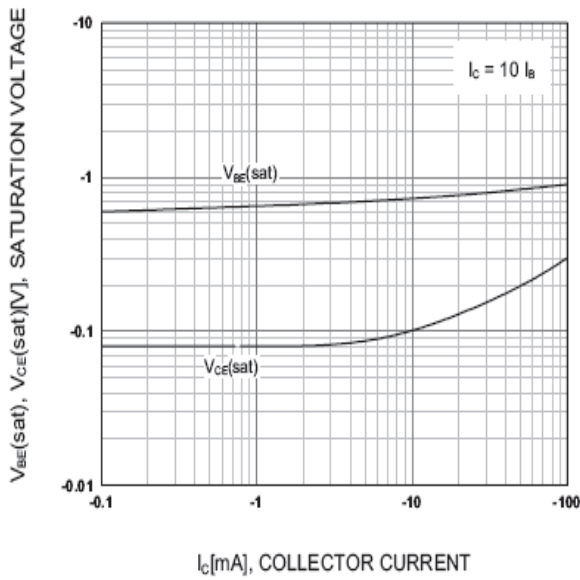
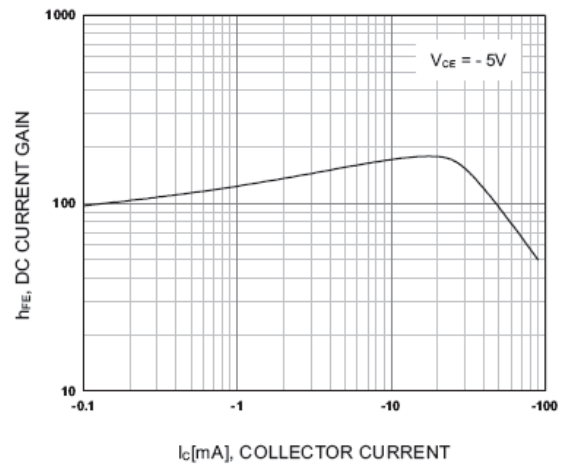
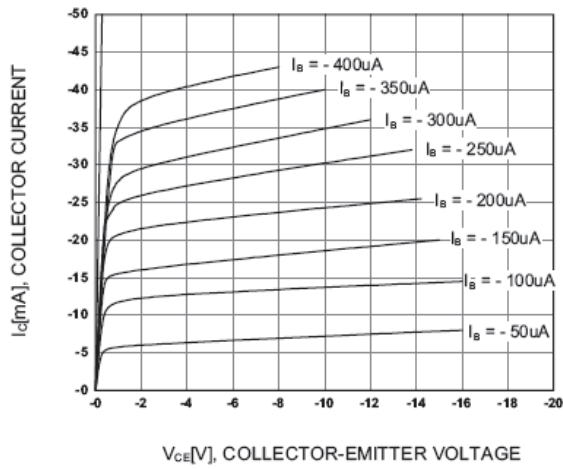
## BC856/857/858

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BC856 BC857 BC858	$V_{(BR)CBO}$ $I_C = -10\mu A, I_E = 0$	-80 -50 -30			V
Collector-emitter breakdown voltage	BC856 BC857 BC858	$V_{(BR)CEO}$ $I_C = -10mA, I_B = 0$	-65 -45 -30			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$ $I_E = -1\mu A, I_C = 0$	-5			V
Collector cut-off current		$I_{CBO}$ $V_{CB} = -30V, I_E = 0$		-1	-15	nA
Emitter cut-off current		$I_{EBO}$ $V_{EB} = -5V, I_C = 0$			-0.1	$\mu A$
DC current gain	BC856A,857A,858A BC856B,857B,858B BC857C,858C	$h_{FE}$ $V_{CE} = -5V, I_C = -2mA$	125 220 420		250 475 800	
Collector-emitter saturation voltage		$V_{CE(sat)}$ $I_C = -100mA, I_B = -5mA$ $I_C = -10mA, I_B = -0.5mA$			-0.65 -0.3	V
Base-emitter saturation voltage		$V_{BE(sat)}$ $I_C = -100mA, I_B = -5mA$			-1.1	V
collector capacitance		$C_c$ $V_{CB} = -10V, I_E = I_e = 0$ $f = 1MHz$		4.5		pF
Transition frequency		$f_T$ $V_{CE} = -5V, I_C = -10mA$ $f = 100MHz$	100			MHz

TYPICAL CHARACTERISTICS @  $T_a = 25^\circ C$  unless otherwise specified

## NPN general purpose Transistor

## BC856/857/858



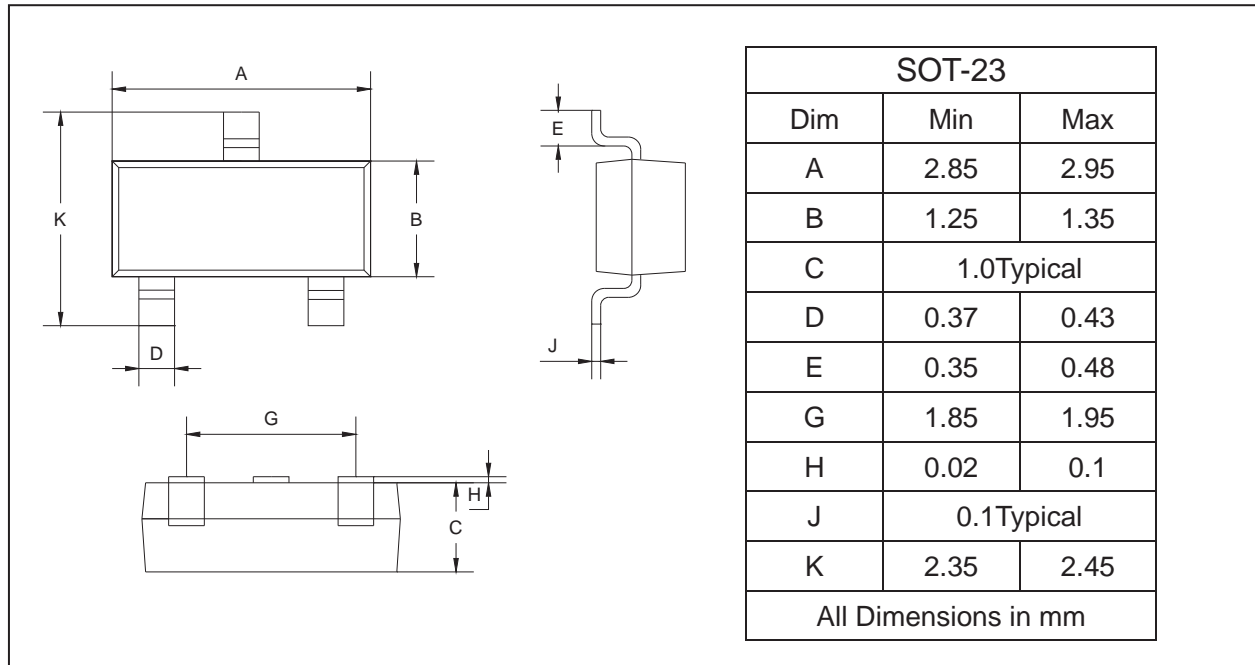
## NPN general purpose Transistor

## BC856/857/858

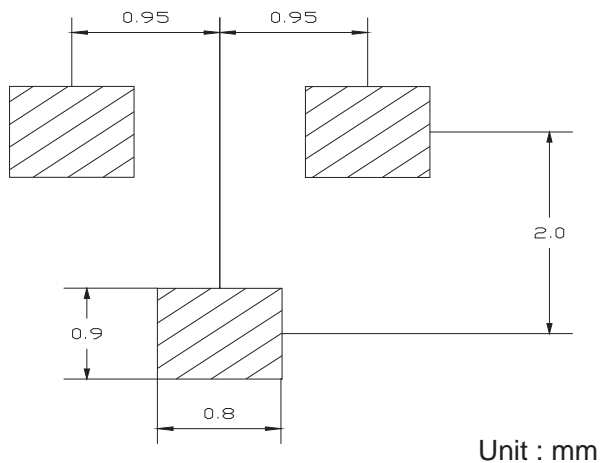
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BC856/857/858	SOT-23	3000/Tape&Reel