

BC856/BC857/BC858

BC856/BC857/BC858 SOT-23 Plastic-Encapsulate Transistors (PNP)

General description

SOT-23 Plastic-Encapsulate Transistors (PNP)

FEATURES

- Complementary to BC846/BC847/BC848
- Power Dissipation of 200mW
- Ideally suited for automatic insertion
- For switching and AF amplifier applications
- SOT-23 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any



DEVICE MARKING CODE:

BC856A=3A	BC856B=3B	
BC857A=3E	BC857B=3F	BC857C=3G
BC858A=3J	BC858B=3K	BC858C=3L

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbols		Value	Unit
Collector-Base Voltage	V _{CB0}	BC856	-80	V
		BC857	-50	
		BC858	-30	
Collector-Emitter Voltage	V _{CEO}	BC856	-65	V
		BC857	-45	
		BC858	-30	
Emitter -Base Voltage	V _{EBO}		-6	V
Collector Current-Continuous	I _c		-100	mA
Collector Power Dissipation	P _c		200	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}		625	°C/W

BC856/BC857/BC858

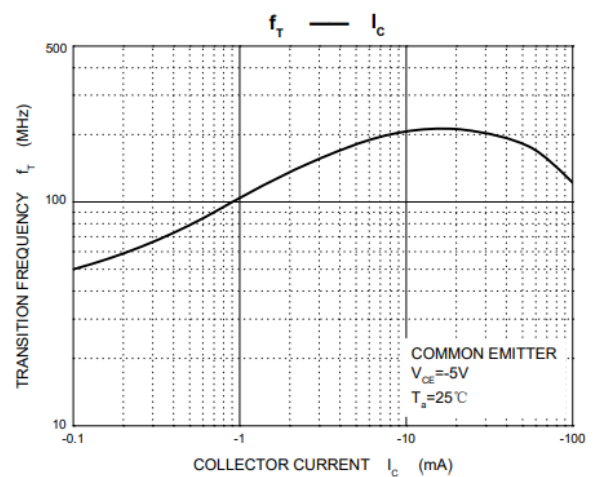
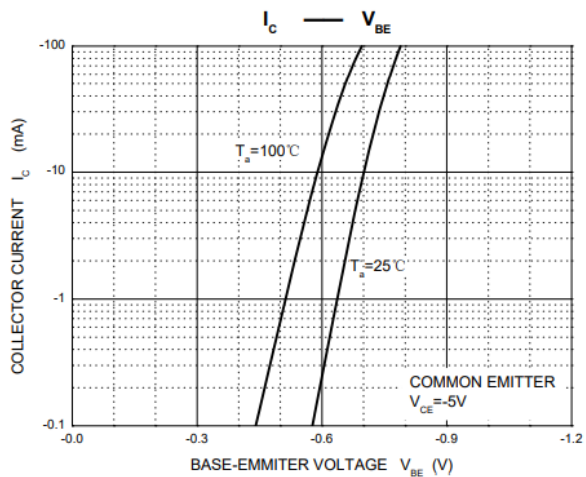
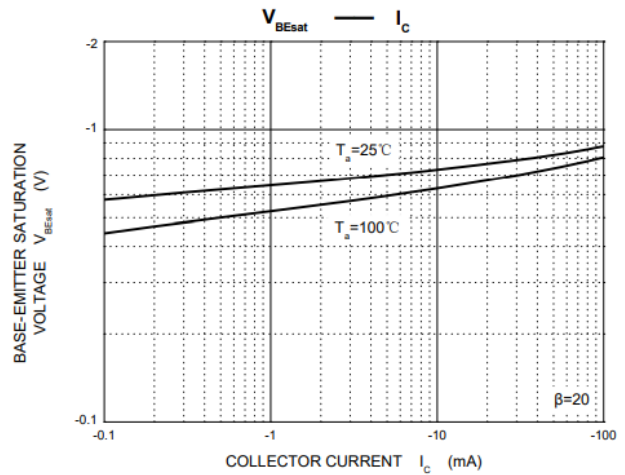
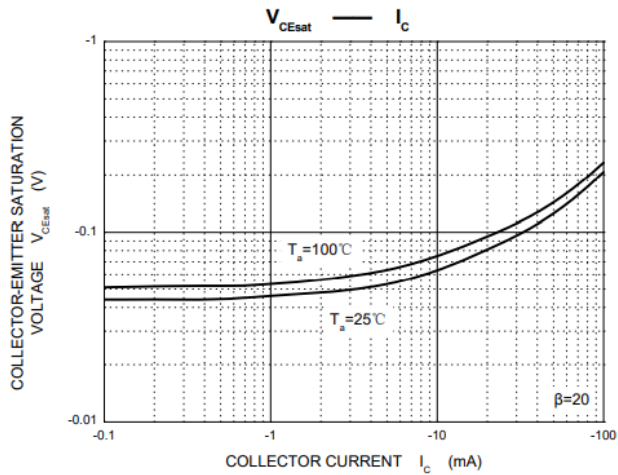
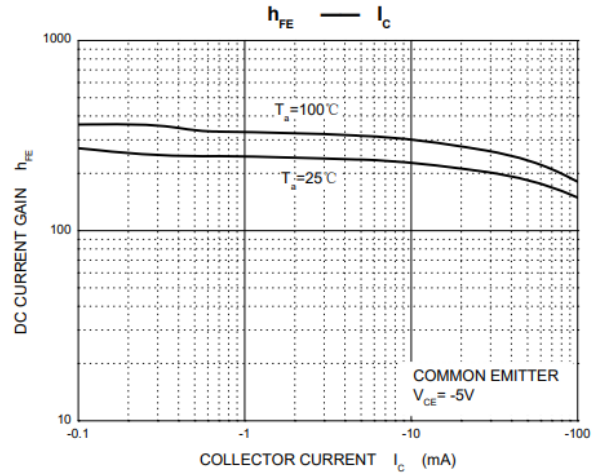
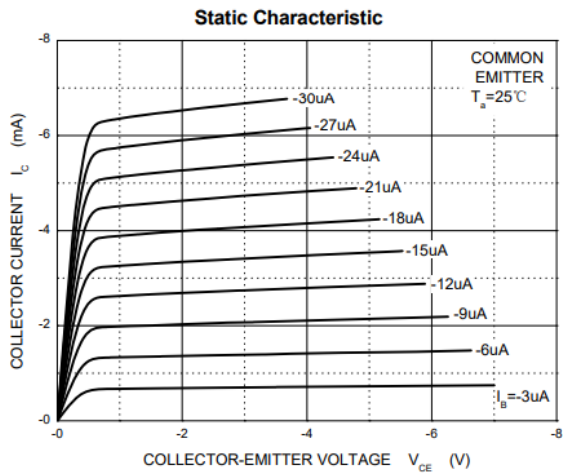
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$ BC856 BC857 BC858	-80 -50 -30		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$ BC856 BC857 BC858	-65 -45 -30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	-6		V
Collector cut-off current	I_{CBO}	$V_{CB} = -70V, I_E = 0$ $V_{CB} = -45V, I_E = 0$ BC856 BC857 BC858		-100	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -60V, I_B = 0$ $V_{CE} = -40V, I_B = 0$ BC856 BC857 BC858		-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-100	nA
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -2mA$ BC856A;BC857A;BC858A BC856B;BC857B;BC858B BC857C;BC858C	125 220 420	250 475 800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -5mA$		-0.50	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100mA, I_B = -5mA$		-1.10	V
Transition frequency	f_T	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$	100		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, f = 1MHz$		4.5	pF



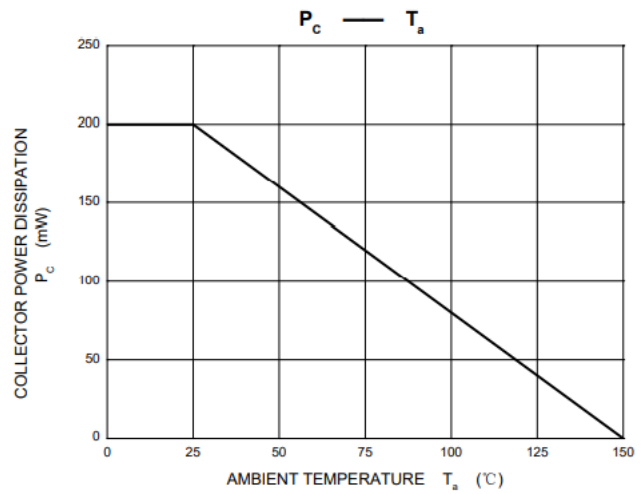
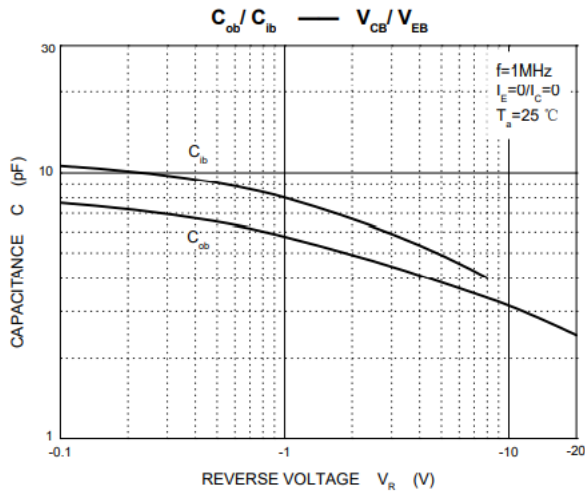
BC856/BC857/BC858

RATING AND CHARACTERISTIC CURVES

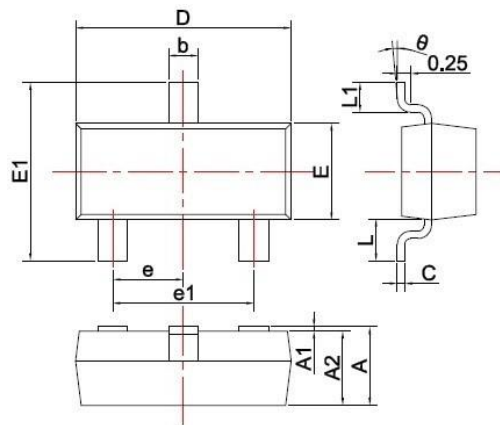




BC856/BC857/BC858



SOT-23 PACKAGE OUTLINE Plastic surface mounted package

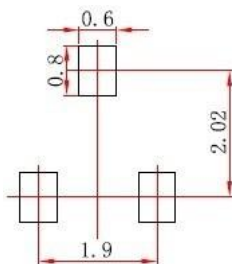


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
H	0°	8°

Unit: mm

Precautions: PCB Design

Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs



Note:

1. Controlling dimension: In millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.

Important Notice and Disclaimer

DOESHARE has used reasonable care in preparing the information included in this document, but DOESHARE does not warrant that such information is error free. DOESHARE assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.

DOESHARE no warranty, representation or guarantee regarding the documents, circuits and products specification, DOESHARE reservation rights to make changes for any documents, products, circuits and specifications at any time without notice.

Purchasers are solely responsible for the choice, selection and use of the DOESHARE products and services described herein, and DOESHARE assumes no liability whatsoever relating to the choice, selection or use of the products and services described herein.

No license, express or implied, by implication or otherwise under any intellectual property rights of DOESHARE.

Resale of DOESHARE products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by DOESHARE for the DOESHARE product or service described herein and shall not create or extend in any manner whatsoever, any liability of DOESHARE.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [Doeshare manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NJVMJD148T4G](#) [NTE123AP-10](#) [NTE153MCP](#) [NTE16](#)
[NTE195A](#) [NTE92](#) [C4460](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC2712S-GR,LF](#) [2SC5488A-TL-H](#)
[2SD2150T100R](#) [SP000011176](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC2412KT146S](#) [2SD1816S-TL-E](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#)
[MJE340](#) [US6T6TR](#) [NJL0281DG](#) [732314D](#) [CPH3121-TL-E](#) [CPH6021-TL-H](#) [873787E](#) [IMZ2AT108](#) [UMX21NTR](#) [MCH6102-TL-E](#) [FP204-](#)
[TL-E](#) [NJL0302DG](#) [2N3583](#) [2SA2014-TD-E](#) [2SC2812-5-TB-E](#) [30A02MH-TL-E](#) [NSV40301MZ4T1G](#) [NTE13](#) [NTE26](#) [NTE282](#) [NTE323](#)