

# Plastic-Encapsulate Transistors

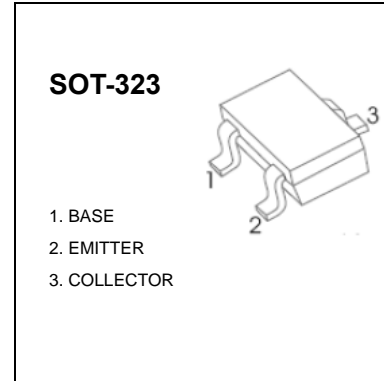
TRANSISTOR (PNP)

## FEATURES

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

## MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

| Symbol           | Parameter                     | Value   | Unit               |
|------------------|-------------------------------|---------|--------------------|
| $V_{\text{CBO}}$ | Collector-Base Voltage        |         |                    |
|                  | BC856W                        | -80     | V                  |
|                  | BC857W                        | -50     |                    |
|                  | BC858W                        | -30     |                    |
| $V_{\text{CEO}}$ | Collector-Emitter Voltage     |         |                    |
|                  | BC856W                        | -65     | V                  |
|                  | BC857W                        | -45     |                    |
|                  | BC858W                        | -30     |                    |
| $V_{\text{EBO}}$ | Emitter-Base Voltage          | -5      | V                  |
| $I_{\text{c}}$   | Collector Current –Continuous | -0.1    | A                  |
| $P_{\text{C}^*}$ | Collector Power Dissipation   | 150     | mW                 |
| $T_{\text{J}}$   | Junction Temperature          | 150     | $^{\circ}\text{C}$ |
| $T_{\text{stg}}$ | Storage Temperature           | -65-150 | $^{\circ}\text{C}$ |

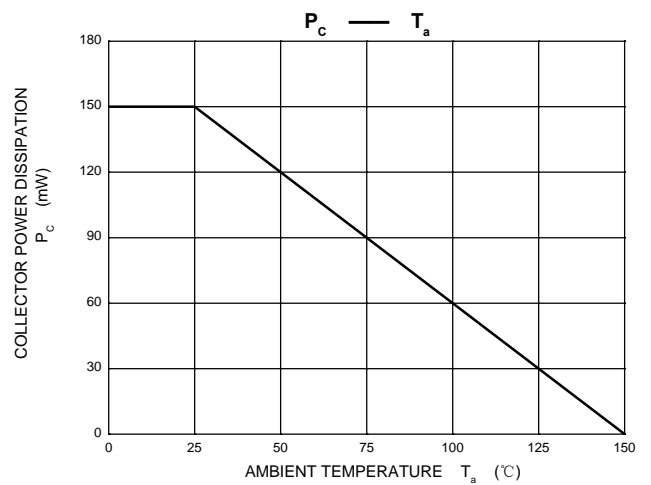
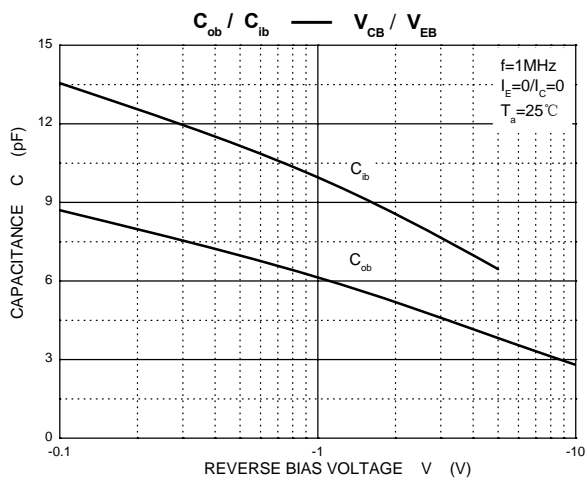
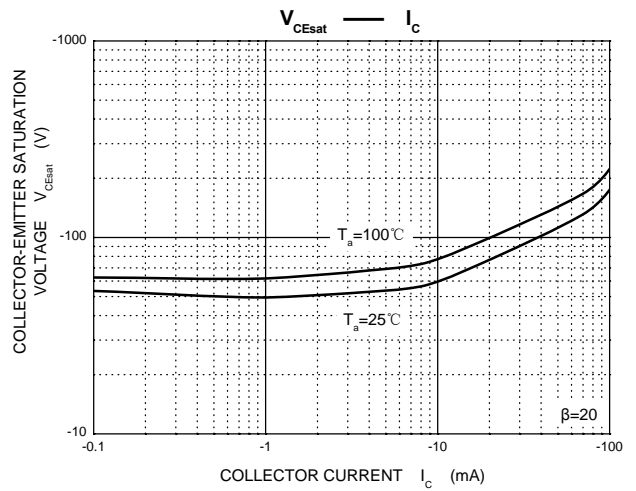
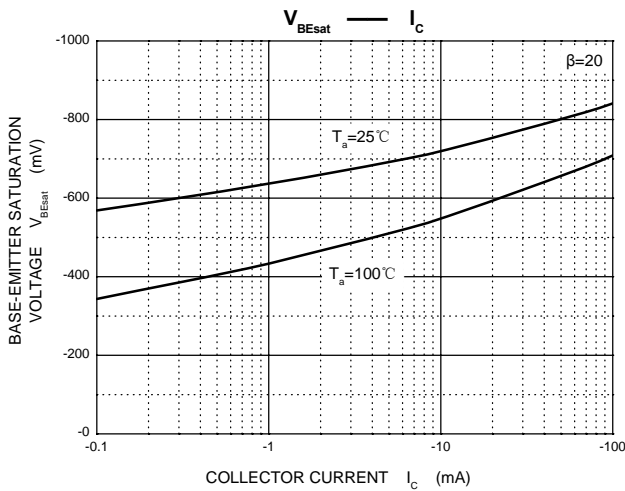
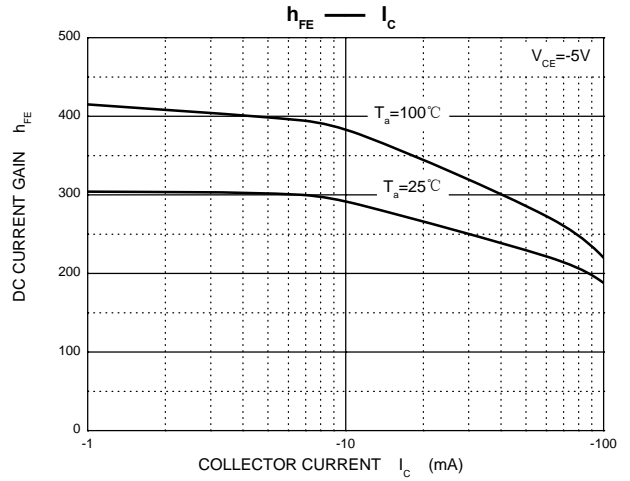
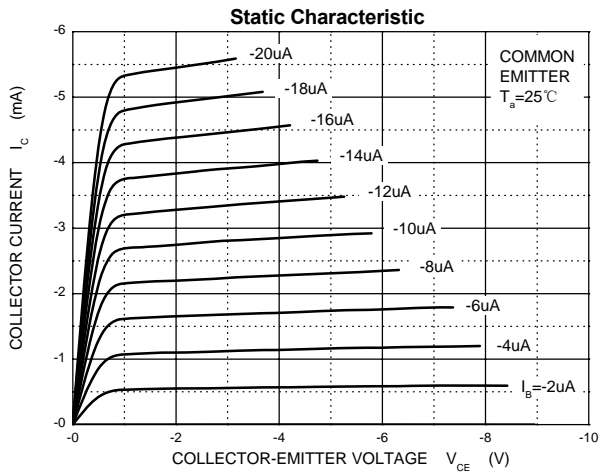


## DEVICE MARKING

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

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

| Parameter                            | Symbol  | Test conditions      | Min   | Max               | Unit              |
|--------------------------------------|---|----------------------|---|-------------------|-------------------|
| Collector-base breakdown voltage     | BC856W<br>BC857W<br>BC858W                                      | V <sub>CBO</sub>     | I <sub>C</sub> = -10μA, I <sub>E</sub> =0                 | -80<br>-50<br>-30 | V                 |
| Collector-emitter breakdown voltage  | BC856W<br>BC857W<br>BC858W                                      | V <sub>CEO</sub>     | I <sub>C</sub> = -10mA, I <sub>B</sub> =0                 | -65<br>-45<br>-30 | V                 |
| Emitter-base breakdown voltage       |   | V <sub>EBO</sub>     | I <sub>E</sub> = -1μA, I <sub>C</sub> =0                  | -5                | V                 |
| Collector cut-off current            |   | I <sub>CBO</sub>     | V <sub>CB</sub> = -30 V , I <sub>E</sub> =0               |                   | -15 nA            |
| DC current gain                      | BC856AW, 857AW,858AW<br>BC856BW, 857BW,858BW<br>BC857CW,BC858CW | h <sub>FE</sub>      | V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA              | 125<br>220<br>420 | 250<br>475<br>800 |
| Collector-emitter saturation voltage |   | V <sub>CE(sat)</sub> | I <sub>C</sub> =-100mA, I <sub>B</sub> = -5mA             |                   | -0.65 V           |
| Base-emitter saturation voltage      |   | V <sub>BE(sat)</sub> | I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA            |                   | -1.1 V            |
| Transition frequency                 |   | f <sub>T</sub>       | V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA<br>f=100MHz | 100               | MHz               |
| Collector capacitance                |   | C <sub>ob</sub>      | V <sub>CB</sub> =-10V, f=1MHz                             |                   | 4.5 pF            |



## **PACKAGE OUTLINE**

**Plastic surface mounted package; 3 leads**

**SOT-323**

## 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 [Hong Kong Chuangji manufacturer](#):*

Other Similar products are found below :

[BC559C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [NJVMJD148T4G](#) [NTE16](#) [NTE195A](#) [IMX9T110](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [FMC5AT148](#) [2N2369ADCSM](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC4618TLN](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [US6T6TR](#) [BAX18/A52R](#) [BC556/112](#) [IMZ2AT108](#) [MMST8098T146](#) [UMX21NTR](#) [MCH6102-TL-E](#) [TTA1452B,S4X\(S](#) [2N3879](#) [NTE13](#) [NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [JANTX2N2920L](#) [JANTX2N3735](#) [JANSR2N2222AUB](#) [CMLT3946EG TR](#) [SNSS40600CF8T1G](#) [2N6987](#) [CMLT3906EG TR](#) [GRP-DATA-JANS2N2907AUB](#) [GRP-DATA-JANS2N2222AUA](#) [MMDT3946FL3-7](#) [2N4240](#) [JANS2N3019](#) [MSB30KH-13](#) [2N2221AUB](#) [2SD1815T-TL-E](#)