

### BC556, B BC557, A, B, C BC558, B

TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$P_{CM}$ : 0.625 W ( $T_{amb}=25^{\circ}C$ )

Collector current

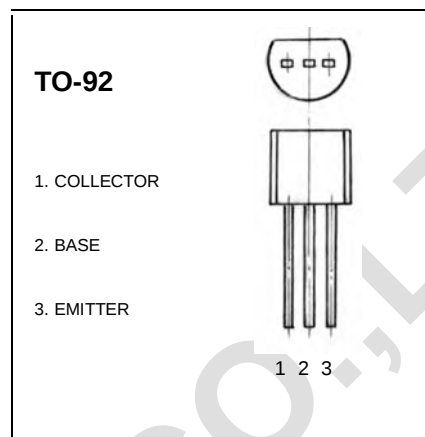
$I_{CM}$ : -0.1 A

Collector-base voltage

$V_{CBO}$ : BC556 -80 V  
BC557 -50 V  
BC558 -30 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$



#### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ unless otherwise specified)

| Parameter                            | Symbol                                                              | Test conditions                                                                               | MIN                                    | MAX                                    | UNIT    |
|--------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|---------|
| Collector-base breakdown voltage     | BC556<br>BC557<br>BC558                                             | $V_{CBO}$<br>$I_C = -100\mu A, I_E = 0$                                                       | -80<br>-50<br>-30                      |                                        | V       |
| Collector-emitter breakdown voltage  | BC556<br>BC557<br>BC558                                             | $V_{CEO}$<br>$I_C = -2mA, I_B = 0$                                                            | -65<br>-45<br>-30                      |                                        | V       |
| Emitter-base breakdown voltage       |                                                                     | $V_{EBO}$<br>$I_E = -100\mu A, I_C = 0$                                                       | -6                                     |                                        | V       |
| Collector cut-off current            | BC556<br>BC557<br>BC558                                             | $I_{CBO}$<br>$V_{CB} = -70V, I_E = 0$<br>$V_{CB} = -45V, I_E = 0$<br>$V_{CB} = -25V, I_E = 0$ |                                        | -0.1                                   | $\mu A$ |
| Collector cut-off current            | BC556<br>BC557<br>BC558                                             | $I_{CEO}$<br>$V_{CE} = -60V, I_B = 0$<br>$V_{CE} = -40V, I_B = 0$<br>$V_{CE} = -25V, I_B = 0$ |                                        | -0.1                                   | $\mu A$ |
| Emitter cut-off current              | BC556<br>BC557<br>BC558                                             | $I_{EBO}$<br>$V_{EB} = -5V, I_C = 0$                                                          |                                        | -0.1                                   | $\mu A$ |
| DC current gain                      | BC556<br>BC557<br>BC558<br>BC557A<br>BC556B/BC557B/BC558B<br>BC557C | $h_{FE(1)}$<br>$V_{CE} = -5V, I_C = -2mA$                                                     | 120<br>120<br>120<br>120<br>180<br>420 | 500<br>800<br>800<br>220<br>460<br>800 |         |
| Collector-emitter saturation voltage |                                                                     | $V_{CE(sat)}$<br>$I_C = -100mA, I_B = -5mA$                                                   |                                        | -0.3                                   | V       |
| Base-emitter saturation voltage      |                                                                     | $V_{BE(sat)}$<br>$I_C = -100mA, I_B = -5mA$                                                   |                                        | -1                                     | V       |
| Transition frequency                 |                                                                     | $f_T$<br>$V_{CE} = -5V, I_C = -10mA$<br>$f = 100MHz$                                          | 150                                    |                                        | MHz     |