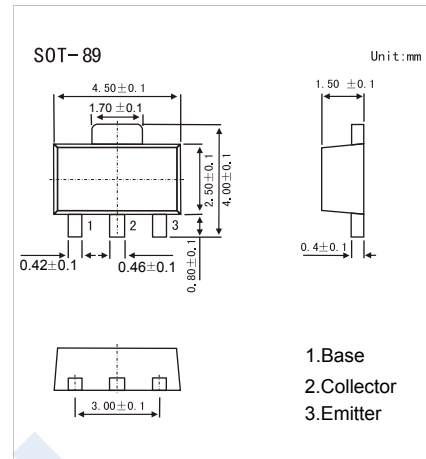


## NPN Transistors

## BF620 (KF620)

## ■ Features

- Low current (max. 50mA)
- High voltage (max. 300V).
- Video output stages.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

| Parameter                      | Symbol    | Rating     | Unit             |
|--------------------------------|-----------|------------|------------------|
| Collector - Base Voltage       | $V_{CB0}$ | 300        | V                |
| Collector - Emitter Voltage    | $V_{CE0}$ | 300        |                  |
| Emitter - Base Voltage         | $V_{EB0}$ | 5          |                  |
| Collector Current - Continuous | $I_C$     | 50         | mA               |
| Collector Power Dissipation    | $P_C$     | 500        | mW               |
| Junction Temperature           | $T_J$     | 150        | $^\circ\text{C}$ |
| Storage Temperature Range      | $T_{stg}$ | -55 to 150 |                  |

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

| Parameter                            | Symbol        | Test Conditions   | Min | Typ | Max | Unit |
|--------------------------------------|---------------|---|-----|-----|-----|------|
| Collector- base breakdown voltage    | $V_{CB0}$     | $I_C = 100 \mu\text{A}$ , $I_E = 0$                                     | 300 |     |     | V    |
| Collector- emitter breakdown voltage | $V_{CE0}$     | $I_C = 1 \text{ mA}$ , $I_B = 0$  | 300 |     |     |      |
| Emitter - base breakdown voltage     | $V_{EB0}$     | $I_E = 100 \mu\text{A}$ , $I_C = 0$                                     | 5   |     |     |      |
| Collector-base cut-off current       | $I_{CB0}$     | $V_{CB} = 200 \text{ V}$ , $I_E = 0$                                    |     |     | 100 | nA   |
| Emitter cut-off current              | $I_{EB0}$     | $V_{EB} = 5 \text{ V}$ , $I_C = 0$                                      |     |     | 50  |      |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 30 \text{ mA}$ , $I_B = 5 \text{ mA}$                            |     |     | 0.6 | V    |
| Base - emitter saturation voltage    | $V_{BE(sat)}$ | $I_C = 30 \text{ mA}$ , $I_B = 5 \text{ mA}$                            |     |     | 1.2 |      |
| DC current gain                      | $h_{FE}$      | $V_{CE} = 20 \text{ V}$ , $I_C = 25 \text{ mA}$                         | 50  |     |     |      |
| Transition frequency                 | $f_T$         | $V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$ , $f = 100 \text{ MHz}$ | 60  |     |     | MHz  |

## ■ Marking

|         |    |
|---------|----|
| Marking | DC |
|---------|----|