

# SOT89 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

## BF621

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### FEATURES

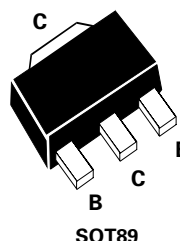
- \* High breakdown and low saturation voltage

### APPLICATIONS

- \* Suitable for video output stages in TV sets
- \* Switching power supplies

COMPLEMENTARY TYPE – BF620

PARTMARKING DETAIL – DF



### ABSOLUTE MAXIMUM RATINGS.

| PARAMETER                                  | SYMBOL        | VALUE       | UNIT        |
|--------------------------------------------|---------------|-------------|-------------|
| Collector-Base Voltage                     | $V_{CBO}$     | -300        | V           |
| Collector-Emitter Voltage                  | $V_{CEO}$     | -300        | V           |
| Emitter-Base Voltage                       | $V_{EBO}$     | -5          | V           |
| Peak Pulse Current                         | $I_{CM}$      | -100        | mA          |
| Continuous Collector Current               | $I_C$         | -50         | mA          |
| Power Dissipation at $T_{amb}=25^{\circ}C$ | $P_{tot}$     | -1          | W           |
| Operating and Storage Temperature Range    | $T_j:T_{stg}$ | -65 to +150 | $^{\circ}C$ |

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

| PARAMETER                             | SYMBOL        | MIN. | MAX.        | UNIT          | CONDITIONS.                                                                             |
|---------------------------------------|---------------|------|-------------|---------------|-----------------------------------------------------------------------------------------|
| Collector-Base Breakdown Voltage      | $V_{(BR)CBO}$ | -300 |             | V             | $I_C = -10\mu A, I_E = 0$                                                               |
| Collector-Emitter Breakdown Voltage   | $V_{(BR)CEO}$ | -300 |             | V             | $I_C = -1mA, I_B = 0^*$                                                                 |
| Emitter-Base Breakdown Voltage        | $V_{(BR)EBO}$ | -5   |             | V             | $I_E = -100\mu A, I_C = 0$                                                              |
| Collector Cut-Off Current             | $I_{CBO}$     |      | -10<br>-20  | nA<br>$\mu A$ | $V_{CB} = -200V, I_E = 0$<br>$V_{CB} = -200V, I_E = 0 \uparrow$                         |
| Collector Cut-Off Current             | $I_{CER}$     |      | -50<br>-10  | nA<br>$\mu A$ | $V_{CE} = -200V, R_{BE} = 2.7K\Omega$<br>$V_{CE} = -200V, R_{BE} = 2.7K\Omega \uparrow$ |
| Emitter Cut-Off Current               | $I_{EBO}$     |      | -10         | $\mu A$       | $V_{EB} = -5V, I_C = 0$                                                                 |
| Collector-Emitter Saturation Voltage  | $V_{CE(sat)}$ |      | -0.6        | V             | $I_C = -30mA, I_B = -5mA^*$                                                             |
| Base-Emitter Saturation Voltage       | $V_{BE(sat)}$ |      | -0.9        | V             | $I_C = -20mA, I_B = -2mA^*$                                                             |
| Static Forward Current Transfer Ratio | $h_{FE}$      | 50   |             |               | $I_C = -25mA, V_{CE} = -20V^*$                                                          |
| Transition Frequency                  | $f_T$         |      | 100 Typical | MHz           | $I_C = -10mA, V_{CE} = -10V$<br>$f = 100MHz$                                            |
| Output Capacitance                    | $C_{obo}$     |      | 0.8 Typical | pF            | $V_{CB} = -30V, f = 1MHz$                                                               |

$\uparrow T_{amb} = 150^{\circ}C$

\*Measured under pulsed conditions.

For typical characteristics graphs see FMMTA92 datasheet.

