

# PNP POWER TRANSISTORS

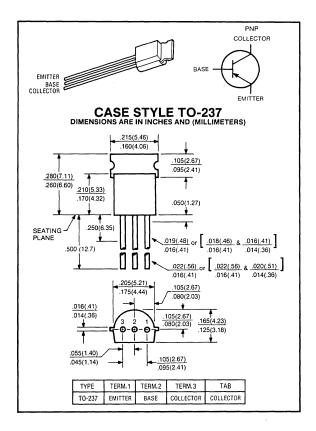
92GU51,51A 2N6726,27

> -30-(-40) VOLTS 2 AMPS, 1.2 WATTS

COMPLEMENTARY TO THE 2N6714, 15/92GU01, 01A SERIES

#### **Applications:**

- Class "B" audio outputs/drivers.
- General purpose switching and lamp drive in industrial and automotive circuits.



### maximum ratings (T<sub>A</sub> = 25°C) (unless otherwise specified)

| RATING                                           | SYMBOL                            | 92GU51/2N6726 | 92GU51A/2N6727 | UNITS |
|--------------------------------------------------|-----------------------------------|---------------|----------------|-------|
| Collector-Emitter Voltage                        | V <sub>CEO</sub>                  | -30           | -40            | Volts |
| Collector-Base Voltage                           | V <sub>CB</sub>                   | -40           | -50            | Volts |
| Emitter Base Voltage                             | V <sub>EB</sub>                   | -5            | -5             | Volts |
| Collector Current — Continuous                   | Ic                                | -2.0          | -2.0           | Α     |
| Total Power Dissipation @ T <sub>A</sub> = 25°C  | P <sub>DP</sub> *                 | 1.2           | 1.2            | Watts |
| Operating and Storage Junction Temperature Range | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150   | -55 to +150    | °C    |

#### thermal characteristics

| Thermal Resistance, Junction to Ambient | $R_{	hetaJA}$ | 167 | 167 | °C/W |
|-----------------------------------------|---------------|-----|-----|------|
| Thermal Resistance, Junction to Case    | Raic          | 50  | 50  | °C/W |

<sup>\*</sup>P<sub>DP</sub> = Practical Power Dissipation, i.e., that power which can be dissipated with the device installed in a typical manner on a printed circuit board with total copper run area equal to 1.0 in.<sup>2</sup> minimum.

## electrical characteristics ( $T_A = 25^{\circ}C$ ) (unless otherwise specified)

| CHARACTERIST                                                                                                                                                             | С                                                                                              | SYMBOL               | MIN               | TYP | MAX         | UNIT  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------|-------------------|-----|-------------|-------|
| off characteristics                                                                                                                                                      |                                                                                                |                      |                   |     |             |       |
| Collector-Emitter Sustaining Voltage (I <sub>C</sub> = -10mA, I <sub>B</sub> = 0A)                                                                                       | 92GU51,2N6726<br>92GU51A,2N6727                                                                | VCEO(sus)            | -30<br>-40        | _   |             | Volts |
| Collector Cut-off Current                                                                                                                                                | (V <sub>CB</sub> = -40V, I <sub>E</sub> = 0A)<br>(V <sub>CB</sub> = -50V, I <sub>E</sub> = 0A) | Ісво                 | <del>-</del>      |     | 1<br>1      | μΑ    |
| Emitter Cutoff Current<br>(V <sub>EB</sub> = -5V, I <sub>C</sub> = 0A)                                                                                                   |                                                                                                | I <sub>EBO</sub>     |                   |     | 1           | μΑ    |
| on characteristics                                                                                                                                                       |                                                                                                | ·                    |                   |     |             |       |
| DC Current Gain<br>(I <sub>C</sub> = -10mA, V <sub>CE</sub> = -1V)<br>(I <sub>C</sub> = -100A, V <sub>CE</sub> = -1V)<br>(I <sub>C</sub> = -100A, V <sub>CE</sub> = -1V) |                                                                                                | h <sub>FE</sub>      | -55<br>-60<br>-50 |     | -<br>-<br>- | _     |
| Collector-Emitter Saturation Voltage (I <sub>C</sub> = -1A, I <sub>B</sub> = -100mA)                                                                                     |                                                                                                | V <sub>CE(sat)</sub> |                   | _   | 5           | v     |
| Base-Emitter On Voltage<br>(I <sub>C</sub> = -1A, V <sub>CE</sub> = -1V)                                                                                                 |                                                                                                | V <sub>BE(on)</sub>  |                   |     | -1.2        | Volts |
| dynamic characteristics                                                                                                                                                  |                                                                                                |                      |                   |     |             |       |
| Collector Capacitance<br>(V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz)                                                                                          |                                                                                                | Сво                  |                   | _   | 30          | pF    |
| Current-Gain Bandwidth Product (I <sub>C</sub> = -50mA, V <sub>CE</sub> = -10V, f = 1MHz)                                                                                |                                                                                                | f⊤                   | 50                |     | _           | MHz   |