

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

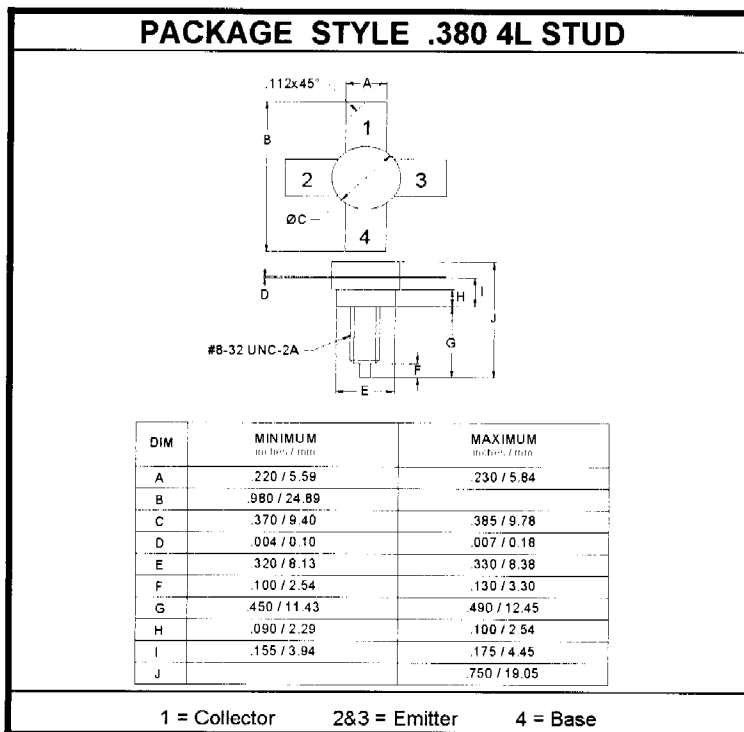
**BLY92C** is designed for Class C FM amplifier applications up to 250 MHz.

## FEATURES:

- $P_G = 11$  dB typical at 175 MHz
- High VSWR capability
- **Omnigold™** Metalization System

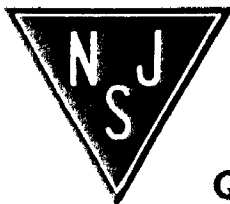
## MAXIMUM RATINGS

|               |                           |
|---------------|---------------------------|
| $I_C$         | 4.0 A                     |
| $V_{CBO}$     | 65 V                      |
| $V_{CEO}$     | 35 V                      |
| $V_{EBO}$     | 4.0 V                     |
| $P_{DISS}$    | 40 W @ $T_C = 25^\circ C$ |
| $T_J$         | -65 °C to +200 °C         |
| $T_{STG}$     | -65 °C to +150 °C         |
| $\theta_{JC}$ | 4.4 °C/W                  |



## CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL     | TEST CONDITIONS                                | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|--|---------|---------|---------|-------|
| $BV_{CES}$ | $I_C = 200$ mA                                 | 65      |         |         | V     |
| $BV_{CEO}$ | $I_C = 200$ mA                                 | 35      |         |         | V     |
| $BV_{EBO}$ | $I_E = 10$ mA                                  | 4.0     |         |         | V     |
| $I_{CBO}$  | $V_{CB} = 30$ V                                |         |         | 2.0     | mA    |
| $h_{FE}$   | $V_{CE} = 5.0$ V $I_C = 200$ mA                | 10      |         | 100     | ---   |
| $C_{ob}$   | $V_{CB} = 30$ V $f = 1.0$ MHz                  |         | 40      | 50      | pF    |
| $P_G$      | $V_{CC} = 28$ V $P_{OUT} = 15$ W $f = 175$ MHz | 10      | 11      |         | dB    |
| $\eta_c$   | $P_{IN} = 1.0$ W                               | 50      | 60      |         | %     |



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