

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI 2N4429** is Designed for Class C Amplifier Applications Up to 1,000 MHz.

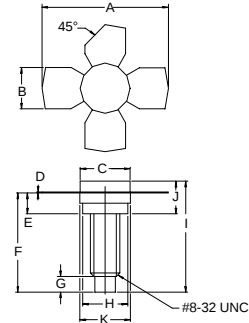
## FEATURES:

- $P_G = 7.5$  dB Typ. at 1.0 W/1000 MHz
- Emitter Ballasting for Ruggedness
- **Omnigold™** Metallization System

## MAXIMUM RATINGS

|               |                                  |
|---------------|----------------------------------|
| $I_C$         | 1.0 A                            |
| $V_{CB}$      | 45 V                             |
| $P_{DISS}$    | 7.0 W @ $T_C = 25^\circ\text{C}$ |
| $T_J$         | -65 to +200 $^\circ\text{C}$     |
| $T_{STG}$     | -65 to +150 $^\circ\text{C}$     |
| $\theta_{JC}$ | 25 $^\circ\text{C/W}$            |

## PACKAGE STYLE .280 4L STUD



| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | 1.010 / 25.65          | 1.055 / 26.80          |
| B   | .220 / 5.59            | .230 / 5.84            |
| C   | .270 / 6.86            | .285 / 7.24            |
| D   | .003 / 0.08            | .007 / 0.18            |
| E   | .117 / 2.97            | .137 / 3.48            |
| F   | .572 / 14.53           |                        |
| G   | .130 / 3.30            |                        |
| H   | .245 / 6.22            | .255 / 6.48            |
| I   | .640 / 16.26           |                        |
| J   | .175 / 4.45            | .217 / 5.51            |
| K   | .275 / 6.99            | .285 / 7.24            |

**ORDER CODE: ASI10900**

## CHARACTERISTICS $T_C = 25^\circ\text{C}$

| SYMBOL            | TEST CONDITIONS                                   | MINIMUM   | TYPICAL   | MAXIMUM | UNITS         |
|-------------------|---------------------------------------------------|-----------|-----------|---------|---------------|
| $BV_{CBO}$        | $I_C = 1$ mA                                      | 45        |           |         | V             |
| $BV_{CER}$        | $I_C = 20$ mA $R_{BE} = 10 \Omega$                | 45        |           |         | V             |
| $BV_{EBO}$        | $I_E = 1$ mA                                      | 3.5       |           |         | V             |
| $I_{CBO}$         | $V_{CE} = 28$ V                                   |           |           | 250     | $\mu\text{A}$ |
| $h_{FE}$          | $V_{CE} = 5.0$ V $I_C = 100$ mA                   | 15        |           | 150     | ---           |
| $F_t$             | $V_{CE} = 20$ V $I_C = 100$ mA                    | 600       |           |         | MHz           |
| $C_{ob}$          | $V_{CB} = 28$ V $f = 1.0$ MHz                     |           |           | 5.0     | pF            |
| $P_G$<br>$\eta_C$ | $V_{CE} = 28$ V $P_{OUT} = 5.0$ W $f = 1,000$ MHz | 6.5<br>40 | 7.5<br>50 |         | dB<br>%       |