

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

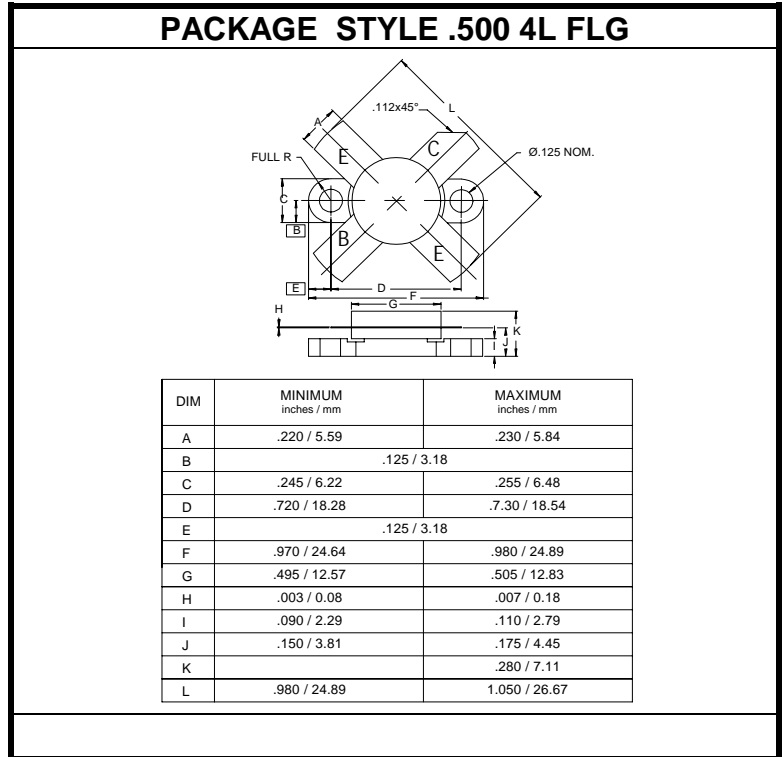
The **ASI MRF428** is Designed for high voltage applications up to 30 MHz

**FEATURES:**

- $P_G = 14$  dB min. at 150 W/30 MHz
- $IMD_3 = -30$  dBc max. at 150 W(PEP)
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

|               |                       |
|---------------|-----------------------|
| $I_C$         | 10 A                  |
| $V_{CBO}$     | 110 V                 |
| $V_{CEO}$     | 55 V                  |
| $V_{EBO}$     | 4.0 V                 |
| $P_{DISS}$    | 233 W @ $T_C = 25$ °C |
| $T_J$         | -65 °C to +200 °C     |
| $T_{STG}$     | -65 °C to +150 °C     |
| $\theta_{JC}$ | 0.75 °C/W             |


**CHARACTERISTICS**  $T_C = 25$  °C

| SYMBOL     | TEST CONDITIONS                                | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|------------------------------------------------|---------|---------|---------|-------|
| $BV_{CBO}$ | $I_C = 100$ mA                                 | 110     |         |         | V     |
| $BV_{CES}$ | $I_C = 100$ mA                                 | 110     |         |         | V     |
| $BV_{CEO}$ | $I_C = 100$ mA                                 | 55      |         |         | V     |
| $BV_{EBO}$ | $I_E = 10$ mA                                  | 4.0     |         |         | V     |
| $I_{CEO}$  | $V_{CE} = 30$ V                                |         |         | 5.0     | mA    |
| $I_{CES}$  | $V_{CE} = 60$ V                                |         |         | 5.0     | mA    |
| $h_{FE}$   | $V_{CE} = 6.0$ V $I_C = 1.4$ mA                | 18      |         | 43.5    | ---   |
| $C_{ob}$   | $V_{CB} = 50$ V $f = 1.0$ MHz                  |         |         | 200     | pF    |
| $G_p$      |                                                | 14      |         |         | dB    |
| $IMD_3$    | $V_{CE} = 50$ V $I_{CQ} = 100$ mA $f = 30$ MHz |         |         | -30     | dBc   |
| $\eta_C$   | $P_{OUT} = 150$ W (PEP)                        | 37      |         |         | %     |