

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

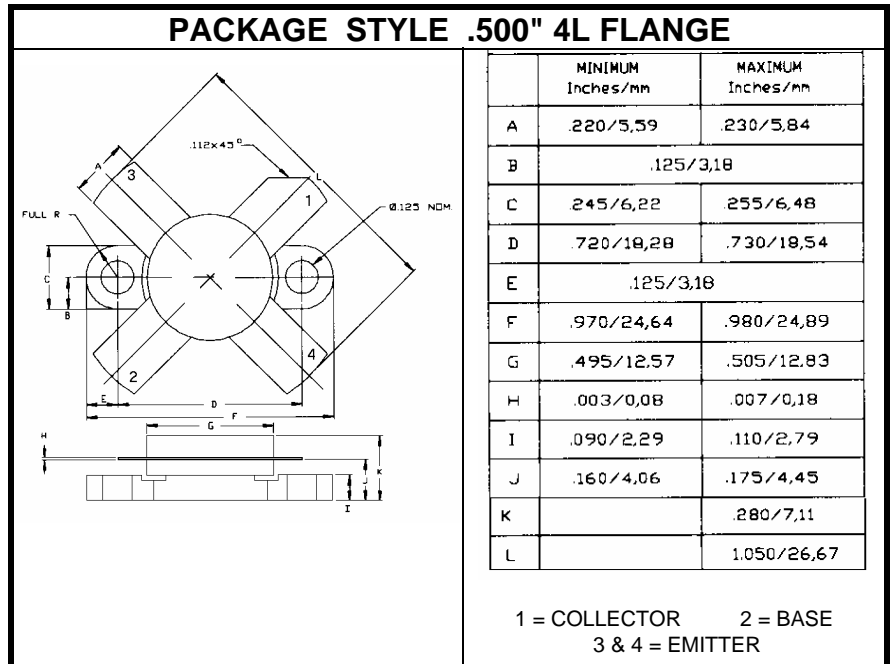
The **ASI MRF454** is Designed for 12.5 Volt Power Amplifier Applications up to 30 MHz.

**FEATURES INCLUDE:**

- Replacement for **SD1405**
- $P_G = 12$  dB Min. @ 30MHz & 80W
- Withstands **20:1 Load VSWR**

**MAXIMUM RATINGS**

|               |                            |
|---------------|----------------------------|
| $I_C$         | 20 A                       |
| $V_{CB}$      | 45 V                       |
| $V_{CE}$      | 25 V                       |
| $V_{EB}$      | 4.0 V                      |
| $P_{DISS}$    | 250 W @ $T_C = 25^\circ C$ |
| $T_J$         | -65 °C to +200 °C          |
| $T_{STG}$     | -65 °C to +150 °C          |
| $\theta_{JC}$ | 0.7 °C/W                   |


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

| SYMBOL     | TEST CONDITIONS                             | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|---|---------|---------|---------|-------|
| $BV_{CES}$ | $I_C = 50$ mA                               | 36      |         |         | V     |
| $BV_{CEO}$ | $I_C = 100$ mA                              | 18      |         |         | V     |
| $BV_{EBO}$ | $I_E = 10$ mA                               | 4.0     |         |         | V     |
| $I_{CES}$  | $V_{CE} = 15$ V                             |         |         | 15      | mA    |
| $h_{FE}$   | $V_{CE} = 5.0$ V $I_C = 5.0$ A              | 10      |         | 150     | ---   |
| $C_{OB}$   | $V_{CB} = 15$ V $f = 1.0$ MHz               |         | 250     |         | pF    |
| $G_{PE}$   | $V_{CC} = 15$ V $f = 30.000$ & $30.001$ MHz | 12      |         |         | dB    |
| $\eta_C$   | $P_{OUT} = 80$ W(PEP)                       | 50      |         |         | %     |