

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

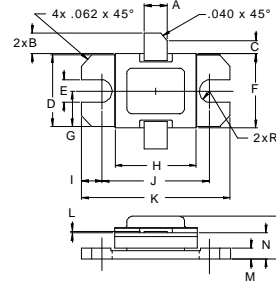
The **ASI AVF450** is Designed for

**FEATURES:**

- Input Matching Network
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

|                         |                                |
|-------------------------|--------------------------------|
| <b>I<sub>C</sub></b>    | 28 A                           |
| <b>V<sub>CC</sub></b>   | 55 V                           |
| <b>P<sub>DISS</sub></b> | 910 W @ T <sub>C</sub> = 25 °C |
| <b>T<sub>J</sub></b>    | -65 °C to +250 °C              |
| <b>T<sub>STG</sub></b>  | -65 °C to +200 °C              |
| <b>θ<sub>JC</sub></b>   | 0.12 °C/W                      |

**PACKAGE STYLE .400 2L FLG(A)**


| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | .135 / 3.43            | .145 / 3.68            |
| B   | .100 / 2.54            | .120 / 3.05            |
| C   | .050 / 1.27            |                        |
| D   | .376 / 9.55            | .396 / 10.06           |
| E   | .110 / 2.79            | .130 / 3.30            |
| F   | .395 / 10.03           | .407 / 10.34           |
| G   | .193 / 4.90            |                        |
| H   | .490 / 12.45           | .510 / 12.95           |
| I   | .100 / 2.54            |                        |
| J   | .690 / 17.53           | .710 / 18.03           |
| K   | .890 / 22.61           | .910 / 23.11           |
| L   | .003 / 0.08            | .006 / 0.18            |
| M   | .052 / 1.32            | .072 / 1.83            |
| N   | .118 / 3.00            | .131 / 3.33            |
| P   |                        | .230 / 5.84            |

**ORDER CODE: ASI10575**
**CHARACTERISTICS** T<sub>C</sub> = 25 °C

| SYMBOL                  | TEST CONDITIONS   | MINIMUM | TYPICAL | MAXIMUM | UNITS      |
|-------------------------|---|---------|---------|---------|------------|
| <b>BV<sub>CBO</sub></b> | I <sub>C</sub> = 15 mA  | 65      |         |         | <b>V</b>   |
| <b>BV<sub>CER</sub></b> | I <sub>C</sub> = 50 mA    R <sub>BE</sub> = 10 Ω                          | 65      |         |         | <b>V</b>   |
| <b>BV<sub>EBO</sub></b> | I <sub>E</sub> = 1.0 mA   | 3.5     |         |         | <b>V</b>   |
| <b>I<sub>CES</sub></b>  | V <sub>CE</sub> = 50 V  |         |         | 35      | <b>mA</b>  |
| <b>h<sub>FE</sub></b>   | V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 1.0 A                         | 15      |         | 120     | <b>---</b> |
| <b>P<sub>G</sub></b>    | V <sub>CC</sub> = 50 V    P <sub>OUT</sub> = 450 W    f = 1030 - 1090 MHz | 6.5     |         |         | <b>dB</b>  |
| <b>η<sub>C</sub></b>    |   | 40      |         |         | <b>%</b>   |