

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI S15-28** is Designed for Class AB or C, Common Emitter Linear HF Communications Applications.

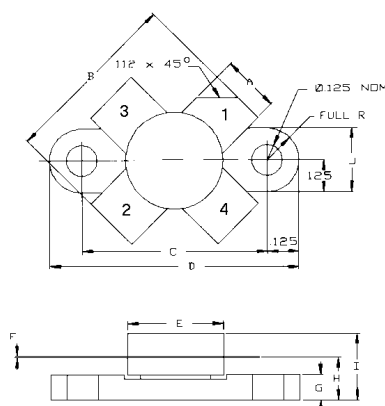
## FEATURES INCLUDE:

- High Power Gain
- Emitter Ballasting

## MAXIMUM RATINGS

|                         |                               |
|-------------------------|-------------------------------|
| <b>I<sub>C</sub></b>    | 3.0 A                         |
| <b>V<sub>CB</sub></b>   | 65 V                          |
| <b>P<sub>DISS</sub></b> | 30 W @ T <sub>C</sub> = 25 °C |
| <b>T<sub>J</sub></b>    | -55 °C to +200 °C             |
| <b>T<sub>STG</sub></b>  | -55 °C to +200 °C             |
| <b>q<sub>JC</sub></b>   | 5.8 °C/W                      |

## PACKAGE STYLE .380" 4L FLG



|   | MINIMUM<br>Inches/mm | MAXIMUM<br>Inches/mm |
|---|----------------------|----------------------|
| A | .220/5,59            | .230/5,84            |
| B | .980/24,89           |                      |
| C | .370/9,40            | .385/9,78            |
| D | .004/0,10            | .007/0,18            |
| E | .320/8,13            | .330/8,38            |
| F | .100/2,54            | .130/3,30            |
| G | .450/11,43           | .490/12,45           |
| H | .090/2,29            | .100/2,54            |
| I | .155/3,94            | .175/4,45            |
| J |                      | .750/19,05           |

1 = COLLECTOR      2 = BASE  
3 & 4 = EMITTER

## CHARACTERISTICS T<sub>C</sub> = 25 °C

| SYMBOL                  | TEST CONDITIONS                                                       | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|-----------------------------------------------------------------------|---------|---------|---------|-------|
| <b>BV<sub>CBO</sub></b> | I <sub>C</sub> = 200 mA                                               | 65      |         |         | V     |
| <b>BV<sub>CEO</sub></b> | I <sub>C</sub> = 200 mA                                               | 35      |         |         | V     |
| <b>BV<sub>EBO</sub></b> | I <sub>E</sub> = 10 mA                                                | 4.0     |         |         | V     |
| <b>I<sub>CBO</sub></b>  | V <sub>CB</sub> = 30 V                                                |         |         | 1.0     | mA    |
| <b>h<sub>FE</sub></b>   | V <sub>CE</sub> = 5.0 V      I <sub>C</sub> = 200 mA                  | 10      |         |         | ---   |
| <b>C<sub>ob</sub></b>   | V <sub>CB</sub> = 30 V      f = 1.0 MHz                               |         |         | 35      | pF    |
| <b>P<sub>out</sub></b>  | V <sub>CE</sub> = 28 V      P <sub>in</sub> = 500 mW      fo = 30 MHz | 15      | ---     |         | W     |
| <b>P<sub>g</sub></b>    |                                                                       | 15      | 18      | ---     | dB    |
| <b>h<sub>c</sub></b>    |                                                                       | ---     | 65      |         | %     |