

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI S50-28** is Designed for Class AB or C, Common Emitter Linear HF Communications Applications.

FEATURES INCLUDE:

- High Power Gain
- Emitter Ballasting

MAXIMUM RATINGS

| | |
|-------------------------|--------------------------------|
| I_C | 9.0 A |
| V_{CB} | 65 V |
| P_{DISS} | 117 W @ T _C = 25 °C |
| T_J | -55 °C to +200 °C |
| T_{STG} | -55 °C to +200 °C |
| q_{JC} | 1.7 °C/W |

PACKAGE STYLE .500" 4L FLG

| | MINIMUM Inches/mm | MAXIMUM Inches/mm |
|---|----------------------|----------------------|
| A | .220/5,59 | .230/5,84 |
| B | .125/3,18 | |
| C | .245/6,22 | .255/6,48 |
| D | .720/18,28 | .730/18,54 |
| E | .125/3,18 | |
| F | .970/24,64 | .980/24,89 |
| G | .495/12,57 | .505/12,83 |
| H | .003/0,08 | .007/0,18 |
| I | .090/2,29 | .110/2,79 |
| J | .160/4,06 | .175/4,45 |
| K | | .280/7,11 |
| L | | 1.050/26,67 |

1 = COLLECTOR 2 = BASE
3 & 4 = EMITTER

CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|--|---------|---------|---------|-------|
| BV_{CBO} | I _C = 200 mA | 65 | | | V |
| BV_{CEO} | I _C = 200 mA | 35 | | | V |
| BV_{EBO} | I _E = 10 mA | 4.0 | | | V |
| I_{CBO} | V _{CB} = 30 V | | | 2.0 | mA |
| h_{FE} | V _{CE} = 5.0 V I _C = 500 mA | 10 | | 200 | --- |
| C_{ob} | V _{CB} = 30 V f = 1.0 MHz | | | 150 | pF |
| P_{out} | V _{CE} = 28 V P _{in} = 1.0 W fo = 30 MHz | 50 | 60 | | W |
| P_G | | 17 | 18 | | dB |
| h_C | | | 65 | | % |