

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

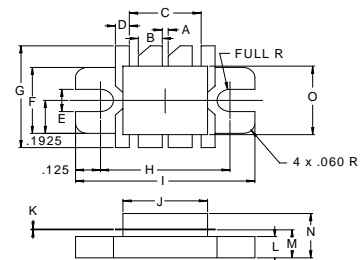
The **ASI SD1456** is Designed for Television Band III Applications up to 225 MHz.

FEATURES:

- Common Emitter
- $P_G = 11$ dB at 100 W/225 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|-----------------------|
| I_C | 16 A |
| V_{CB0} | 65 V |
| V_{CEO} | 33 V |
| V_{EBO} | 3.5 V |
| P_{DISS} | 150 W @ $T_C = 25$ °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 0.8 °C/W |

PACKAGE STYLE .400 8L FLG


| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | | .030 / 0.76 |
| B | .115 / 2.92 | .125 / 3.18 |
| C | | .360 / 9.14 |
| D | .065 / 1.65 | .075 / 1.91 |
| E | | .130 / 3.30 |
| F | .380 / 9.65 | .390 / 9.91 |
| G | .735 / 18.67 | .765 / 19.43 |
| H | .645 / 16.38 | .655 / 16.64 |
| I | .895 / 22.73 | .905 / 22.99 |
| J | .420 / 10.67 | .430 / 10.92 |
| K | .003 / 0.08 | .007 / 0.18 |
| L | .120 / 3.05 | .130 / 3.30 |
| M | .159 / 4.04 | .175 / 4.45 |
| N | | .280 / 7.11 |
| O | .395 / 10.03 | .405 / 10.29 |

CHARACTERISTICS $T_C = 25$ °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|--|---------|---------|---------|-------|
| BV_{CB0} | $I_C = 50$ mA | 65 | | | V |
| BV_{CER} | $I_C = 50$ mA $R_{BE} = 15$ Ω | 60 | | | V |
| BV_{CEO} | $I_C = 50$ mA | 33 | | | V |
| BV_{EBO} | $I_E = 5.0$ mA | 3.5 | | | V |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 500$ mA | 20 | | 150 | --- |
| C_{OB} | $V_{CB} = 28$ V $f = 1.0$ MHz | --- | 60 | --- | pF |
| P_G | $V_{CE} = 28$ V $I_C = 2 \times 100$ mA $f = 225$ MHz $P_{OUT} = 100$ W | 11 | | | dB |