

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

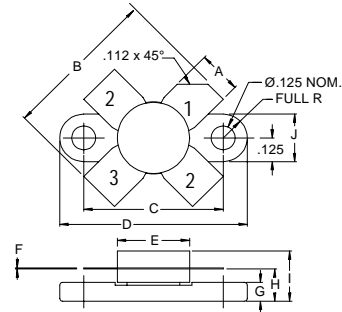
The **ASI CD2315** is designed for broadband amplifier applications in commercial and amateur communication equipment.

FEATURES:

- $P_G = 18$ dB min. at 75 W/30 MHz
- $IMD_3 = -30$ dBc max. at 75 W (PEP)
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|-----------------------|
| I_C | 10 A |
| V_{CB} | 60 V |
| V_{CE} | 35 V |
| P_{DISS} | 140 W @ $T_C = 25$ °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 1.05 °C/W |

PACKAGE STYLE .380 4L FLG


| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | .220 / 5.59 | .230 / 5.84 |
| B | .785 / 19.94 | |
| C | .720 / 18.29 | .730 / 18.54 |
| D | .970 / 24.64 | .980 / 24.89 |
| E | | .385 / 9.78 |
| F | .004 / 0.10 | .006 / 0.15 |
| G | .085 / 2.16 | .105 / 2.67 |
| H | .160 / 4.06 | .180 / 4.57 |
| I | | .280 / 7.11 |
| J | .240 / 6.10 | .255 / 6.48 |

1 = Collector 2 = Emitter 3 = Base

CHARACTERISTICS $T_C = 25$ °C

| SYMBOL | TEST CONDITIONS | | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|------------------|--------------------------------------|---------------|---------|---------|---------|-------|
| BV_{CEO} | $I_C = 50$ mA | | | 35 | | | V |
| BV_{CER} | $I_C = 50$ mA | $R_{BE} = 10$ Ω | | 60 | | | V |
| BV_{EBO} | $I_E = 10$ mA | | | 4.0 | | | V |
| I_{CES} | $V_E = 28$ V | | | | | 5 | mA |
| h_{FE} | $V_{CE} = 5.0$ V | $I_C = 1.0$ A | | 10 | | 100 | --- |
| C_{ob} | $V_{CB} = 28$ V | $f = 1.0$ MHz | | | | 80 | pF |
| G_{PE} | $V_{CE} = 25$ V | $I_{CQ} = 3.2$ A | $f = 225$ MHz | 13.5 | 14.5 | | dB |
| IMD_3 | $P_{REF} = 16$ W | Vision = -8 dB Side Band = -16 dB | Snd. = -7 dB | | | -55 | dBc |