

NPN RF POWER TRANSISTOR

DESCRIPTION:

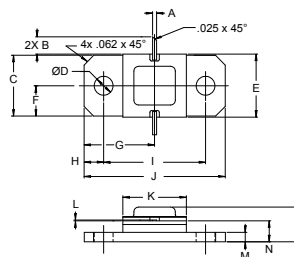
The **AM82731-001** is a Common Base Device Designed for Pulsed S-Band Radar Amplifier Applications.

FEATURES INCLUDE:

- Input/Output Matching
- Gold Metallization
- Emitter Ballasting

MAXIMUM RATINGS

| | |
|-------------------------|---------------------------------|
| I_C | 0.45 A |
| V_{CC} | 34 V |
| P_{DISS} | 11.5 W @ T _C = 25 °C |
| T_J | -65 °C to +250 °C |
| T_{STG} | -65 °C to +200 °C |
| θ_{JC} | 13.0 °C/W |

PACKAGE STYLE 400 2NL FLG


| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | .020 / 0.51 | .030 / 0.76 |
| B | .100 / 2.54 | |
| C | .376 / 9.55 | .396 / 10.06 |
| D | .110 / 2.79 | .130 / 3.30 |
| E | .395 / 10.03 | .407 / 10.34 |
| F | | .193 / 4.90 |
| G | | .450 / 11.43 |
| H | | .125 / 3.18 |
| I | .640 / 16.26 | .660 / 16.76 |
| J | .890 / 22.61 | .910 / 23.11 |
| K | .395 / 10.03 | .415 / 10.54 |
| L | .004 / 0.10 | .007 / 0.18 |
| M | .052 / 1.32 | .072 / 1.83 |
| N | .118 / 3.00 | .131 / 3.33 |
| P | | .230 / 5.84 |

1 = COLLECTOR 2 & 4 = BASE 3 = EMITTER

CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|---|---------|---------|---------|-------|
| BV_{CBO} | I _C = 1.0 mA | 45 | | | V |
| BV_{CER} | I _C = 1.0 mA R _{BE} = 10 Ω | 45 | | | V |
| I_{CES} | V _{CE} = 30 V | | | 0.5 | mA |
| BV_{EBO} | I _E = 1.0 mA | 3.5 | | | V |
| h_{FE} | V _{CE} = 5 V I _C = 100 mA | 10 | | | --- |
| P_{OUT} | V _{CE} = 30 V P _{IN} = 0.3 W f = 2.7 to 3.1 GHz | 1.0 | 1.1 | | W |
| η_C | | 27 | 30 | | % |
| P_G | | 5.2 | 5.6 | | dB |

Note: Pulse Width = 100 μS
Duty Cycle = 10%