

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%