

# RF HYBRID AMPLIFIER

## DESCRIPTION:

The **MWA130** is Designed for broadband linear Applications up to 400 MHz Frequency Range.

## FEATURES:

- $P_G = 14$  dB Typical
- $P_{1dB} = +18.0$  dBm Typical
- $50 \Omega$  Input/ Output Impedance

## MAXIMUM RATINGS

|               |                             |
|---------------|-----------------------------|
| $V_D$         | 5.5 V                       |
| $I_D$         | 60 mA                       |
| $P_{DISS}$    | 350 mW @ $T_C = 25^\circ C$ |
| $RF_{INPUT}$  | 100 mW @ $T_C = 25^\circ C$ |
| $T_C$         | -65 to +125 $^\circ C$      |
| $T_{STG}$     | -65 to +200 $^\circ C$      |
| $\theta_{JC}$ | 110 $^\circ C/W$            |

## PACKAGE STYLE

| DIM | MILLIMETERS |      | INCHES    |       |
|-----|-------------|------|-----------|-------|
|     | MIN         | MAX  | MIN       | MAX   |
| A   | 8.51        | 9.39 | 0.335     | 0.370 |
| B   | 7.75        | 8.50 | 0.305     | 0.335 |
| C   | 3.81        | 4.57 | 0.165     | 0.019 |
| D   | 0.41        | 0.48 | 0.016     | 0.019 |
| G   | 5.08 BSC    |      | 0.200 BSC |       |
| H   | 0.72        | 0.86 | 0.028     | 0.034 |
| J   | 0.74        | 0.14 | 0.029     | 0.045 |
| K   | 12.70       | --   | 0.500     | --    |
| M   | 45° BSC     |      | 45° BSC   |       |
| N   | 2.54 BSC    |      | 0.100 BSC |       |

1 = Input 2 = output 3 = gnd. (CASE)

## CHARACTERISTICS $T_A = 25^\circ C$

| SYMBOL    | TEST CONDITIONS                            | MINIMUM | TYPICAL  | MAXIMUM | UNITS |
|-----------|--------------------------------------------|---------|----------|---------|-------|
| $V_D$     | $I_D = 60$ mA                              | 5.0     | 5.8      | 6.5     | V     |
| $G_p$     | $V_D = 3.1$ V $I_D = 60$ mA $f = 1,00$ MHz | 13      | 14       |         | dB    |
| NF        |                                            |         | 7.0      |         | dB    |
| $P_{1dB}$ |                                            | 10.0    | $\pm 18$ |         | dBm   |
| $P_{R1}$  |                                            |         | 16.8     |         | dB    |
| VSWR      |                                            |         |          | 3:1     | ---   |