

## 6 ~ 18 GHz 38dB Gain 27dBm Power Amplifier

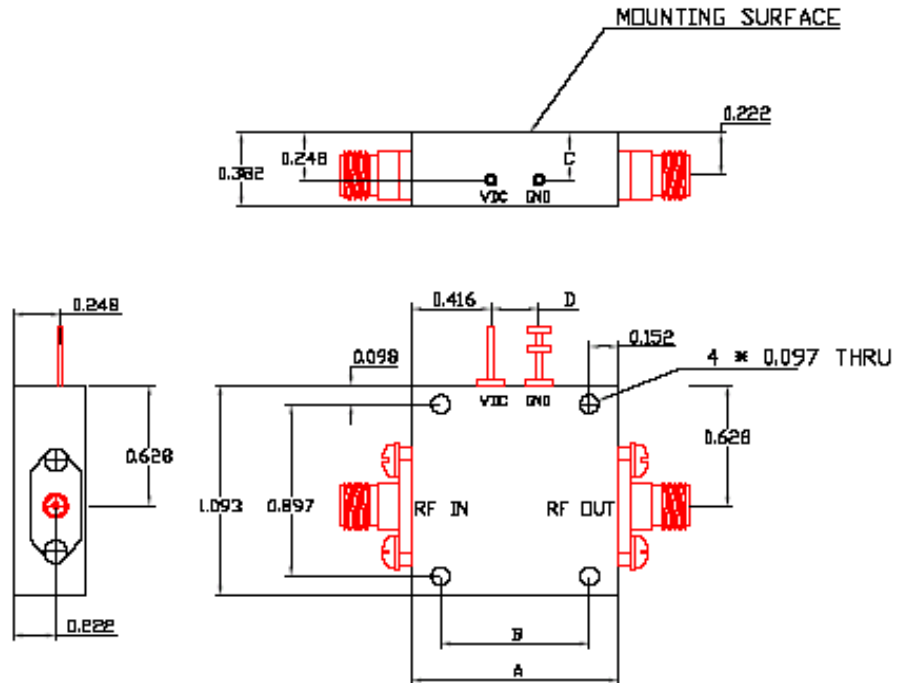
### FEATURES

- $P_{1dB}$ : 27dBm, min.
- Small Signal Gain: 38dB, min.
- Bias Condition: 900mA @ 12 V

### ELECTRICAL SPECIFICATIONS (Specified at 25C)

| SYMBOL                      | DESCRIPTION                                       | MIN        | TYP          | MAX       | UNITS        |
|-----------------------------|---|------------|--------------|-----------|--------------|
| <b>FREQ</b>                 | <b>Frequency Range</b>                            | <b>6</b>   |              | <b>18</b> | <b>GHz</b>   |
| <b>SSG</b>                  | <b>Small Signal Gain</b>                          | <b>38</b>  | <b>42</b>    |           | <b>dB</b>    |
| <b>GOF</b>                  | <b>Small Signal Gain Flatness</b>                 |            | <b>±2.0</b>  |           | <b>dB</b>    |
| <b>NF</b>                   | <b>Noise Figure</b>                               |            | <b>5.4</b>   |           | <b>dB</b>    |
| <b><math>P_{1dB}</math></b> | <b>Output Power at 1 dB Gain Compression</b>      | <b>27</b>  |              |           | <b>dBm</b>   |
| <b>IP3</b>                  | <b>The Third Intercept Point</b>                  |            | <b>37</b>    |           | <b>dBm</b>   |
| <b>VSWR, IN</b>             | <b>Input VSWR</b>                                 |            | <b>2 : 1</b> |           | <b>-----</b> |
| <b>VSWR, OUT</b>            | <b>Output VSWR</b>                                |            | <b>2 : 1</b> |           | <b>-----</b> |
| <b>Vdc</b>                  | <b>DC Supply Voltage(with built-in regulator)</b> | <b>11</b>  | <b>12</b>    | <b>15</b> | <b>Volt</b>  |
| <b>Idc</b>                  | <b>Current Supply</b>                             |            | <b>900</b>   |           | <b>mA</b>    |
| <b>OTR</b>                  | <b>Operating Temperature Range</b>                | <b>-30</b> |              | <b>70</b> | <b>°C</b>    |

Housing : HG7, with SMA female removable connectors, unit is inch



| DIM \ CASE | A     | B     | C     | D    |
|------------|-------|-------|-------|------|
| HG2        | 0.841 | 0.537 | 0.080 | 0.13 |
| HG3        | 1.083 | 0.779 | 0.248 | 0.25 |
| HG4        | 1.333 | 1.029 | 0.248 | 0.25 |
| HG5        | 1.583 | 1.279 | 0.248 | 0.25 |
| HG6        | 1.833 | 1.529 | 0.248 | 0.25 |
| HG7        | 2.083 | 1.779 | 0.248 | 0.25 |