



## Amplifier Datasheet

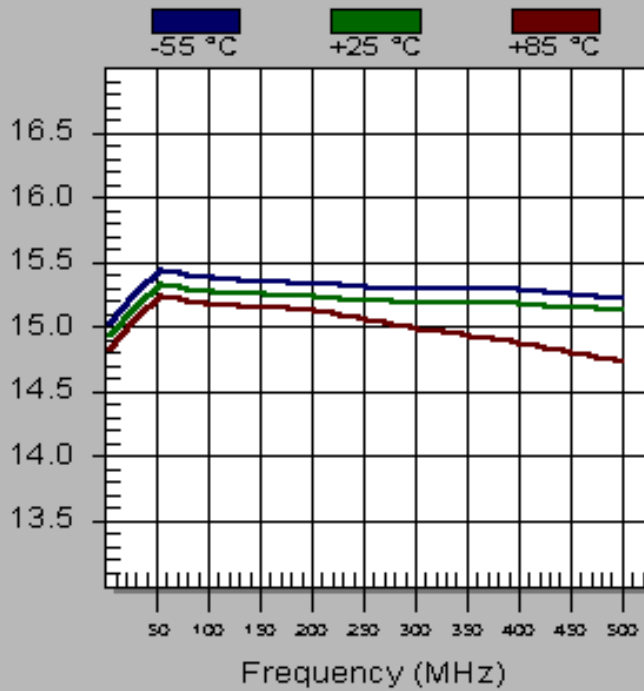
# TM6149

## Product Data Summary

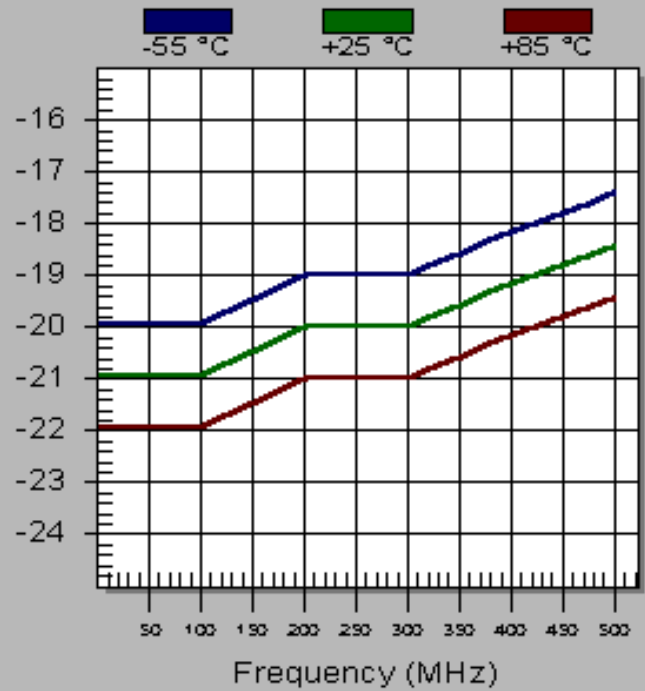
| Parameter                       | Min/Max     | Typical   |
|---------------------------------|-------------|-----------|
| Operating Frequency             | 5 - 500 MHz |           |
| Noise Figure                    | 6.0 dB      | 5.0 dB    |
| Gain                            | 14.5 dB     | 15.3 dB   |
| Power Output (1 dB Compression) | +14.5 dBm   | +16.0 dBm |
| 2nd Order Intercept             |             | +41.0 dBm |
| 3rd Order Intercept             |             | +30.0 dBm |
| Reverse Isolation               | -18.0 dB    | -19.0 dB  |
| VSWR Input                      | 2.0:1       | 1.3:1     |
| VSWR Output                     | 2.0:1       | 1.3:1     |
| DC Voltage                      |             | 15.0 V    |
| DC Current                      |             | 45.0 mA   |

## Typical Performance

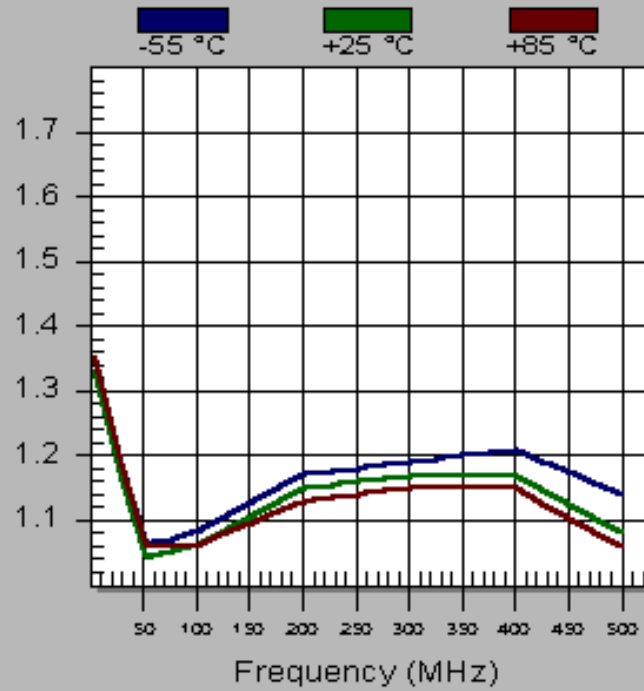
TM6149 Gain (dB)



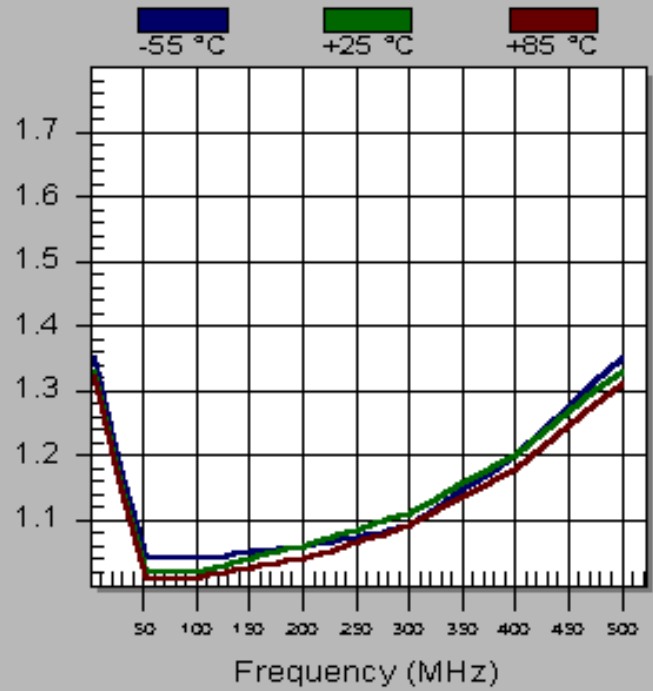
TM6149 Reverse Isolation (dB)

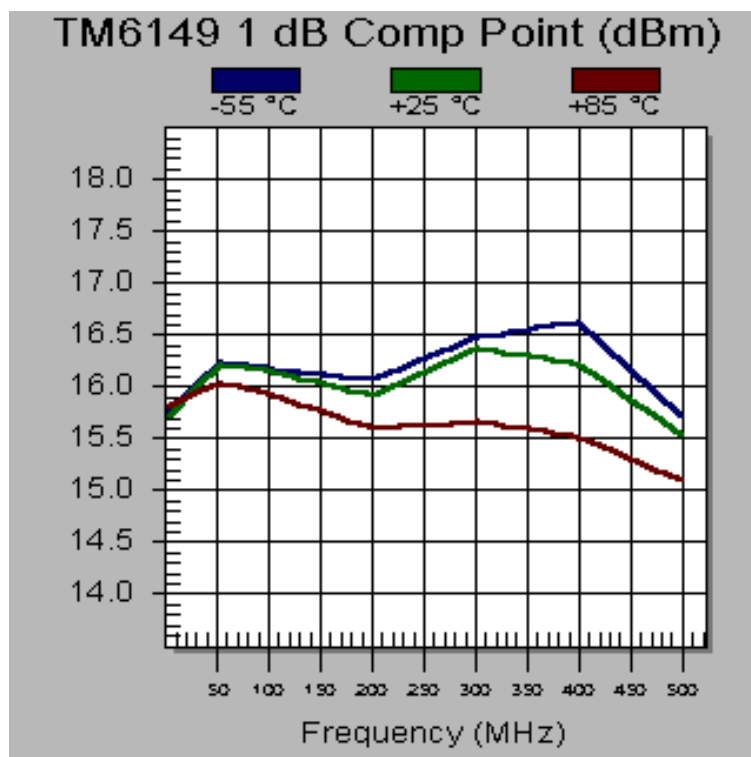
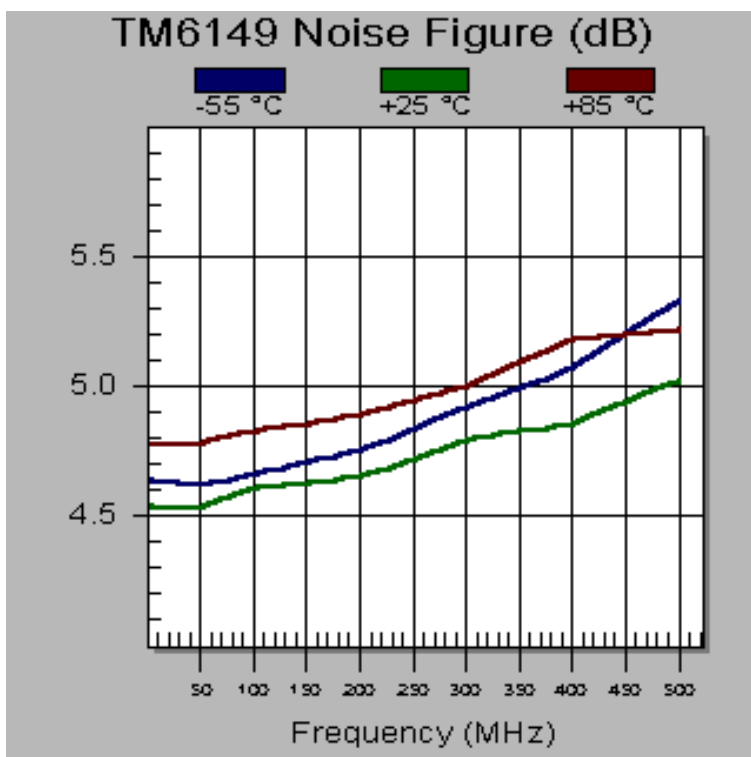


TM6149 Input VSWR



TM6149 Output VSWR





## Packaging Options

### S-Parameters

| Frequency | S11   |       | S21  |        | S12    |       | S22   |        |
|-----------|-------|-------|------|--------|--------|-------|-------|--------|
| (MHz)     | Mag   | Ang   | Mag  | Ang    | Mag    | Ang   | Mag   | Ang    |
| 5         | 0.140 | -66.0 | 5.58 | -167.0 | 0.0900 | 13.0  | 0.140 | 119.0  |
| 50        | 0.020 | 22.0  | 5.85 | 172.0  | 0.0900 | 1.0   | 0.010 | 93.0   |
| 100       | 0.030 | 49.0  | 5.81 | 161.0  | 0.0900 | -2.0  | 0.010 | -171.0 |
| 200       | 0.070 | 52.0  | 5.78 | 141.0  | 0.1000 | -7.0  | 0.030 | -160.0 |
| 300       | 0.080 | 44.0  | 5.75 | 121.0  | 0.1000 | -12.0 | 0.050 | 169.0  |
| 400       | 0.080 | 41.0  | 5.75 | 101.0  | 0.1100 | -17.0 | 0.090 | 140.0  |
| 500       | 0.040 | 50.0  | 5.71 | 79.0   | 0.1200 | -25.0 | 0.140 | 110.0  |

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