



# WIDE BAND LIMITING AMPLIFIER

## MTB0502R3005H

### FEATURES

- Wide Bandwidth
- Low Power Consumption
- Low Noise Figure
- Miniature Sizes for drop-In Assembly
- Rugged/compact Thin Film Construction

### APPLICATIONS

- Microwave Radio & VSAT
- Military & Space
- Test Instrumentation
- Fiber Optics



### ELECTRICAL SPECIFICATIONS@25°C:

| Parameter                    | Min | Typical | Max  | Units |
|------------------------------|-----|---------|------|-------|
| Frequency Range              | 0.5 |         | 2    | GHz   |
| Input power Range            | -30 |         | +5   | dBm   |
| Noise Figure                 |     |         | 5.0  | dB    |
| Saturated Power output       | 17  |         | 22   | dBm   |
| output Power Flatness        |     |         | ±1.5 | dB    |
| harmonic output              |     | -10     |      | dBc   |
| VSWR Input/output            |     |         | 2:1  | Ratio |
| Pulse response Overshoot     |     |         | 0.5  | dB    |
| Pulse response Recovery time |     | 50      |      | ns    |
| Pulse response Settling time |     | 50      |      | ns    |
| Pulse response Rise time     |     | 20      |      | ns    |
| DC Power Supply              |     | 12      |      | Volt  |
| Current                      |     | 300     |      | mA    |

### ENVIRONMENTAL RATINGS:

| Parameter                          | Min   | Typical | Max   | Units |
|------------------------------------|-------|---------|-------|-------|
| Max Input power                    |       |         |       | dBm   |
| Operating Temperature              | -40   |         | +85   | °C    |
| Non-operating Temperature          | -55   |         | 125   | °C    |
| Relative humidity (non-condensing) |       | 95      |       | %     |
| Altitude (MIL-STD-810F)            | 10000 |         | 30000 | feet  |
| Shock / Vibration (MIL-STD-810F)   |       | Airbone |       |       |

### MECHANICAL SPECIFICATIONS:

| Parameter            | Valus        | Limits | Units      |
|----------------------|--------------|--------|------------|
| Dimensions           | 44.7*29.5*17 | Max    | Millimeter |
| Weight               | 50           | Max    | gram       |
| RF Connectors Input  | SMA-F        |        |            |
| RF Connectors output | SMA-F        |        |            |
| Impedance            | 50           |        | ohms       |

### OUTLINE DRAWING(mm):

