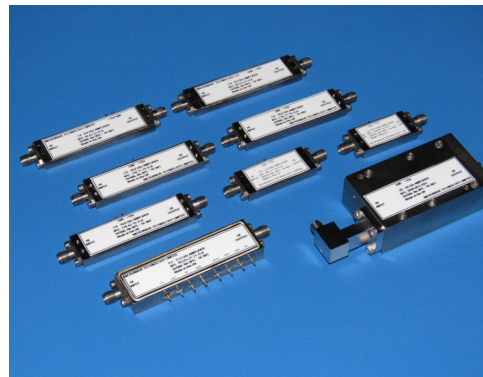


# MICROWAVE TECHNOLOGY

## BROADBAND LIMITING AMPLIFIER



The MTL-218-62-15-7LA is a broadband solid state limiting amplifier which operates over the frequency range 2 to 18 GHz. The amplifier is offered in a low profile mechanical housing which incorporates integral DC regulation and employs GaAs PHEMT devices. The amplifier is designed and manufactured for high reliability and consistent unit to unit performance.

### Electrical specification specified at 25 °C case temperature

| SPECIFICATION                                         | MIN | TYP | MAX  | UNITS |
|-------------------------------------------------------|-----|-----|------|-------|
| Frequency Range                                       | 2.0 |     | 18.0 | GHz   |
| Small Signal Gain                                     | 62  |     |      | dB    |
| Gain Flatness                                         |     |     | ±2.5 | dB    |
| Noise Figure                                          |     |     | 7.0  | dB    |
| Saturated output power                                | 15  |     |      | dBm   |
| Input power range for output saturated power          | -40 |     | +10  | dBm   |
| Input VSWR                                            |     |     | 2:1  |       |
| Output VSWR                                           |     |     | 2:1  |       |
| Harmonics<br>(RF input power range of -40 to +10 dBm) |     |     | 8    | dBc   |
| Input DC voltage                                      |     | 15  |      | V     |
| DC current consumption                                |     | 550 |      | mA    |

(Specification subject to changes without notice)

### Absolute Maximum Ratings

| Parameter             | Value/Type | Units |
|-----------------------|------------|-------|
| Input DC voltage      | 20         | V     |
| RF Input power        | +12        | dBm   |
| Operating temperature | -40 to +85 | °C    |
| Storage temperature   | -55 to +95 | °C    |

### Mechanical Specifications

| Parameter                                         | Value/Type                  | Units | Limits |
|---------------------------------------------------|-----------------------------|-------|--------|
| Dimensions –excluding RF connectors and heat sink | 62(L) x 17(W) x 7(H)        | mm    |        |
| Weight                                            | 30                          | Grams | Max    |
| RF Connectors Input/Output                        | SMA                         |       |        |
| DC connector                                      | Solder in Filter            |       |        |
| Cooling                                           | External Heat Sink Required |       |        |