

**7.2 - 7.8GHz AMPLIFIERS**  
**Uncompensated**      **MLA 2553-000 Series**  
**Temperature Compensated**      **MLA 2653-000 Series**

**UNCOMPENSATED SPECIFICATIONS** (guaranteed @ +25°C)

| Frequency Range (GHz) | Output Power at 1dB Gain Comp (dBm) Min. | Gain (dB) Min. | Gain Flatness (dB) Max. | Gain Variation with Temp (dB/°C) Max. | Noise Figure (dB) Max. | Input and Output VSWR Max. | DC Current at +15V (mA) | Package Styles | Part Number  |
|-----------------------|------------------------------------------|----------------|-------------------------|---------------------------------------|------------------------|----------------------------|-------------------------|----------------|--------------|
| 7.2 - 7.8             | +12                                      | 10             | ±0.30                   | 0.012                                 | 1.5                    | 1.8                        | 80                      | A1, A2         | MLA 2553-101 |
|                       |                                          | 20             | ±0.40                   | 0.024                                 | 1.5                    | 1.8                        | 160                     | A1, A2         | MLA 2553-102 |
|                       |                                          | 30             | ±0.50                   | 0.036                                 | 1.5                    | 1.8                        | 240                     | B1, B2         | MLA 2553-103 |
|                       |                                          | 40             | ±0.50                   | 0.050                                 | 1.5                    | 1.8                        | 320                     | B1, B2         | MLA 2553-104 |
|                       | +18                                      | 10             | ±0.30                   | 0.012                                 | 4.0                    | 1.6                        | 100                     | A1, A2         | MLA 2553-201 |
|                       |                                          | 20             | ±0.40                   | 0.024                                 | 4.0                    | 1.6                        | 180                     | A1, A2         | MLA 2553-202 |
|                       |                                          | 30             | ±0.50                   | 0.036                                 | 4.0                    | 1.6                        | 260                     | B1, B2         | MLA 2553-203 |
|                       |                                          | 40             | ±0.50                   | 0.050                                 | 4.0                    | 1.6                        | 340                     | B1, B2         | MLA 2553-204 |
|                       | +21                                      | 10             | ±0.30                   | 0.012                                 | 5.0                    | 1.6                        | 120                     | A1, A2         | MLA 2553-301 |
|                       |                                          | 20             | ±0.40                   | 0.024                                 | 4.0                    | 1.6                        | 220                     | A1, A2         | MLA 2553-302 |
|                       |                                          | 30             | ±0.50                   | 0.036                                 | 4.0                    | 1.6                        | 300                     | B1, B2         | MLA 2553-303 |
|                       |                                          | 40             | ±0.50                   | 0.050                                 | 4.0                    | 1.6                        | 380                     | B1, B2         | MLA 2553-304 |
|                       | +26                                      | 8              | ±0.30                   | 0.012                                 | 6.0                    | 1.8                        | 280                     | A1, A2         | MLA 2553-401 |
|                       |                                          | 18             | ±0.40                   | 0.024                                 | 5.0                    | 1.8                        | 400                     | A1, A2         | MLA 2553-402 |
|                       |                                          | 28             | ±0.50                   | 0.036                                 | 4.0                    | 1.8                        | 480                     | B1, B2         | MLA 2553-403 |
|                       |                                          | 38             | ±0.50                   | 0.050                                 | 4.0                    | 1.8                        | 560                     | B1, B2         | MLA 2553-404 |
|                       | +29                                      | 7              | ±0.50                   | 0.012                                 | 8.0                    | 1.8                        | 400                     | A1, A2         | MLA 2553-501 |
|                       |                                          | 16             | ±0.75                   | 0.024                                 | 6.0                    | 1.8                        | 600                     | A1, A2         | MLA 2553-502 |
|                       |                                          | 26             | ±1.00                   | 0.036                                 | 5.0                    | 1.8                        | 700                     | B1, B2         | MLA 2553-503 |
|                       |                                          | 36             | ±1.00                   | 0.050                                 | 4.0                    | 1.8                        | 800                     | B1, B2         | MLA 2553-504 |

**TEMPERATURE COMPENSATED SPECIFICATIONS** (guaranteed -55°C to +95°C)

| Frequency Range (GHz) | Output Power at 1dB Gain Comp (dBm) Min. | Gain (dB) Min. | Gain Flatness (dB) Max. | Gain Variation with Temp (dB) Max. | Noise Figure (dB) Max. | Input and Output VSWR Max. | DC Current at +15V (mA) | Package Styles | Part Number  |
|-----------------------|------------------------------------------|----------------|-------------------------|------------------------------------|------------------------|----------------------------|-------------------------|----------------|--------------|
| 7.2 - 7.8             | +12                                      | 8              | ±0.30                   | ±0.50                              | 2.5                    | 1.8                        | 80                      | A1, A2         | MLA 2653-101 |
|                       |                                          | 17             | ±0.40                   | ±0.75                              | 2.5                    | 1.8                        | 160                     | A1, A2         | MLA 2653-102 |
|                       |                                          | 26             | ±0.50                   | ±1.00                              | 2.5                    | 1.8                        | 240                     | B1, B2         | MLA 2653-103 |
|                       |                                          | 35             | ±0.50                   | ±1.50                              | 2.5                    | 1.8                        | 320                     | B1, B2         | MLA 2653-104 |
|                       | +18                                      | 8              | ±0.30                   | ±0.50                              | 6.0                    | 1.6                        | 100                     | A1, A2         | MLA 2653-201 |
|                       |                                          | 17             | ±0.40                   | ±0.75                              | 5.0                    | 1.6                        | 180                     | A1, A2         | MLA 2653-202 |
|                       |                                          | 26             | ±0.50                   | ±1.00                              | 5.0                    | 1.6                        | 260                     | B1, B2         | MLA 2653-203 |
|                       |                                          | 35             | ±0.50                   | ±1.50                              | 5.0                    | 1.6                        | 340                     | B1, B2         | MLA 2653-204 |
|                       | +21                                      | 7              | ±0.30                   | ±0.50                              | 7.0                    | 1.6                        | 120                     | A1, A2         | MLA 2653-301 |
|                       |                                          | 16             | ±0.40                   | ±0.75                              | 6.0                    | 1.6                        | 220                     | A1, A2         | MLA 2653-302 |
|                       |                                          | 25             | ±0.50                   | ±1.00                              | 5.0                    | 1.6                        | 300                     | B1, B2         | MLA 2653-303 |
|                       |                                          | 34             | ±0.50                   | ±1.50                              | 5.0                    | 1.6                        | 380                     | B1, B2         | MLA 2653-304 |
|                       | +26                                      | 6              | ±0.30                   | ±0.50                              | 8.0                    | 1.8                        | 280                     | A1, A2         | MLA 2653-401 |
|                       |                                          | 15             | ±0.40                   | ±0.75                              | 7.0                    | 1.8                        | 400                     | A1, A2         | MLA 2653-402 |
|                       |                                          | 24             | ±0.50                   | ±1.00                              | 6.0                    | 1.8                        | 480                     | B1, B2         | MLA 2653-403 |
|                       |                                          | 33             | ±0.50                   | ±1.50                              | 5.0                    | 1.8                        | 560                     | B1, B2         | MLA 2653-404 |
|                       | +29                                      | 5              | ±0.50                   | ±0.50                              | 9.0                    | 1.8                        | 400                     | A1, A2         | MLA 2653-501 |
|                       |                                          | 14             | ±0.75                   | ±0.75                              | 7.0                    | 1.8                        | 600                     | A1, A2         | MLA 2653-502 |
|                       |                                          | 22             | ±1.00                   | ±1.00                              | 6.0                    | 1.8                        | 700                     | B1, B2         | MLA 2653-503 |
|                       |                                          | 30             | ±1.00                   | ±1.50                              | 5.0                    | 1.8                        | 800                     | B1, B2         | MLA 2653-504 |

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