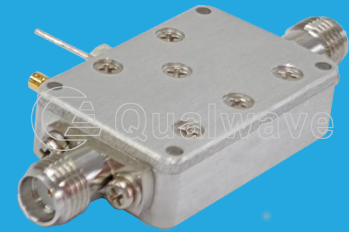


## QLA-500-20000-50-25

0.5~20GHz, 50dB, 2.5dB

Features:  
 \* Broadband  
 \* Low Noise

Applications:  
 \* Wireless  
 \* Receiver  
 \* Laboratory Test  
 \* Radar



### Electrical

|                      |   |
|----------------------|---|
| Frequency:           | 0.5~20GHz                                   |
| Small Signal Gain:   | 50dB typ.                                   |
| Gain Flatness:       | ±5dB typ.                                   |
| Output Power (P1dB): | 16dBm typ.                                  |
| Noise Figure:        | 2.5dB typ.                                  |
| Spurious:            | -60dBc max.                                 |
| Reverse Isolation:   | -60dB typ.                                  |
| VSWR:                | 2 typ.                                      |
| Voltage:             | +5V DC (Outline A)<br>+6~15V DC (Outline B) |
| Current:             | 200mA typ.                                  |
| Impedance:           | 50Ω   |

### Absolute Maximum Ratings\*1

|                 |                                     |
|-----------------|-------------------------------------|
| RF Input Power: | +20dBm                              |
| Voltage:        | +7V (Outline A)<br>+20V (Outline B) |

[1] Permanent damage may occur if any of these limits are exceeded.

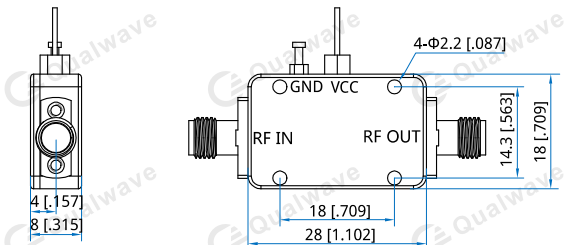
### Mechanical

RF Connectors: SMA Female (Removable)

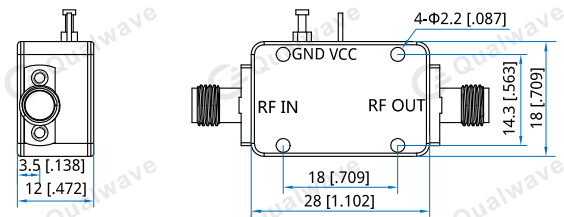
### Environmental

|                            |            |
|----------------------------|------------|
| Operating Temperature:     | -45~+85°C  |
| Non-operating Temperature: | -55~+125°C |

### Outline Drawings



Outline A



Outline B

Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

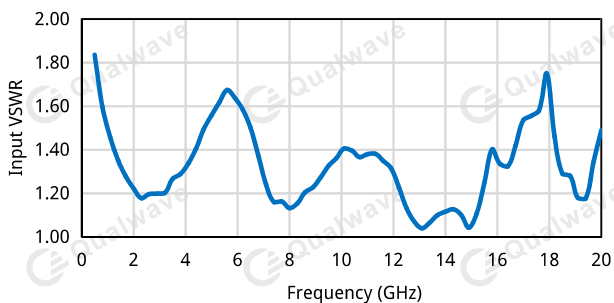
### How To Order

QLA-500-20000-50-25 - Outline A  
 QLA-500-20000-50-25-1 - Outline B

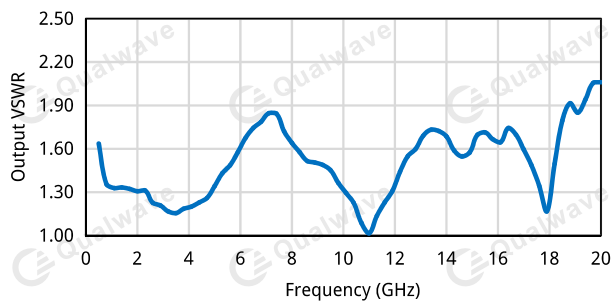
Customization is available upon request.

## Typical Performance Curves

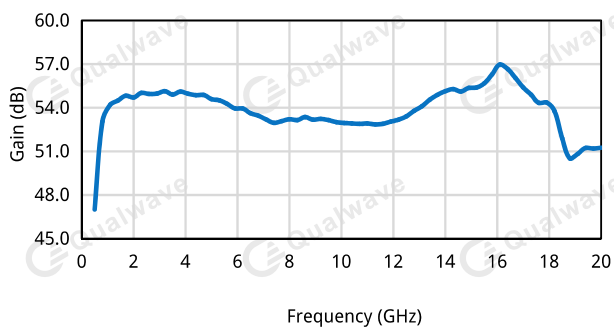
Input VSWR vs. Frequency



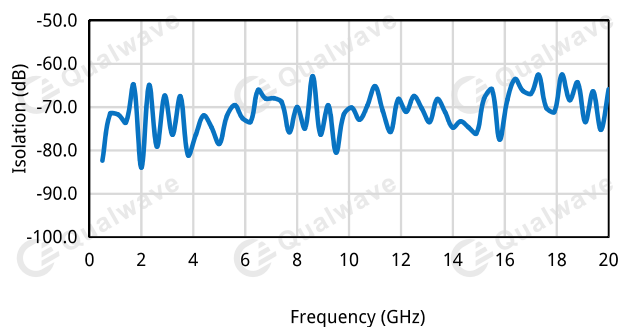
Output VSWR vs. Frequency



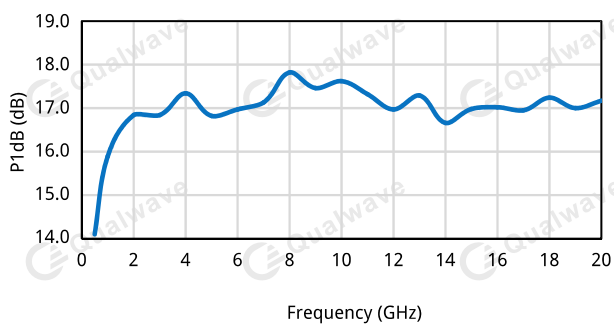
Gain vs. Frequency



Isolation vs. Frequency



P1dB vs. Frequency



Noise Figure vs. Frequency

