

(LTCC) COAXIAL ligh Pass Filter

ZHFG-K2500+

50Ω 2700 to 14500 MHz 2.92mm Female

KEY FEATURES

- Low Insertion Loss, 1.4 dB Typ.
- Return Loss, 15 dB Typ.
- Stop Band Rejection, 55 dB Typ.
- Broadband Connectorized Package
- Power Handling: 4 Watts

APPLICATIONS

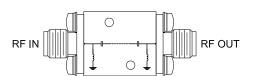
- Test and Measurement Equipment
- Military Applications
- Telecommunications and Broadband Wireless Systems
- 5G Sub 6 GHz
- WiFi 6E and X-Band Radar

PRODUCT OVERVIEW

ZHFG-K2500+ is a 50Ω high pass filter built in broadband connectorized package. Covering 2700-14500 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHFG-K2500+ offer low insertion loss, and excellent power handling capability. It handles up to 4 W RF input power and provides a wide operating temperature range from -55°C to 125°C.

Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS^{1,2} AT +25°C

| Parameter | | F# | Frequency (MHz) | Min. | Тур. | Max. | Units |
|-----------|----------------------------|-----------------|-----------------|------|------|------|-------|
| Pass Band | Insertion Loss | F3-F4 | 2700 - 3500 | _ | 2.5 | _ | |
| | | F4-F5 | 3500 - 13000 | _ | 1.4 | 2.5 | dB |
| | | F5-F6 | 13000 - 14500 | _ | 2.7 | _ | |
| | Return Loss | F3-F4 | 2700 - 3500 | _ | 15 | _ | |
| | | F4-F5 | 3500 - 13000 | | 14 | _ | dB |
| | | F5-F6 | 13000 - 14500 | _ | 10 | _ | |
| Stop Band | Rejection | DC-F1 | DC - 1550 | 42 | 55 | _ | dB |
| | | F1-F2 | 1550 - 1950 | 20 | 32 | _ | uB |
| | Freq. Cut-Off ³ | Fc ³ | 2500 | _ | 3 | _ | dB |

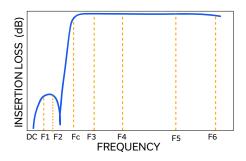
^{1.} This filter is bi-directional, RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS⁴

| Parameter | Ratings | | |
|--------------------------|-------------------|--|--|
| Operating Temperature | -55 °C to +125 °C | | |
| Storage Temperature | -55 °C to +125 °C | | |
| Input Power ⁵ | 4 W @+25°C | | |

^{4.} Permanent damage may occur if any of these limits are exceeded.

TYPICAL FREQUENCY RESPONSE AT +25°C



^{2.} This component should not be used as a DC-block. In applications where DC voltage and/or current is present at either the input or output ports, external DC blocking capacitors are required.

^{3.} Typical variation ± 5%

^{5.} Power rating applies only to signals within the passband. Power rating above +25°C operating temperature decreases linearly to 0.9 W at +125°C.

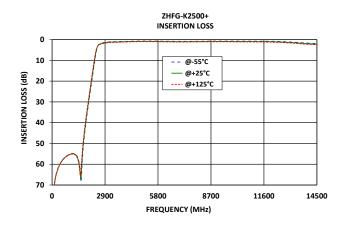


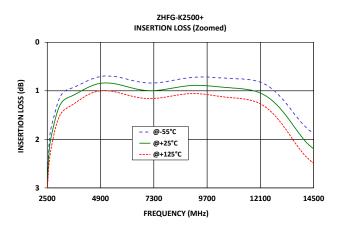
High Pass Filter

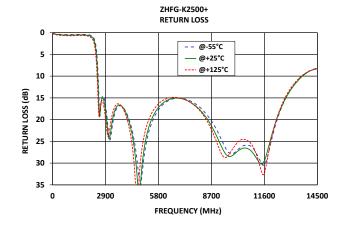
ZHFG-K2500+

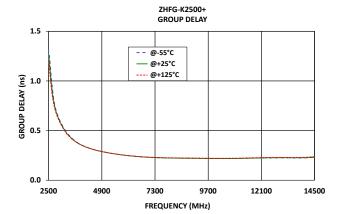
 50Ω 2700 to 14500 MHz 2.92mm Female

TYPICAL PERFORMANCE GRAPHS







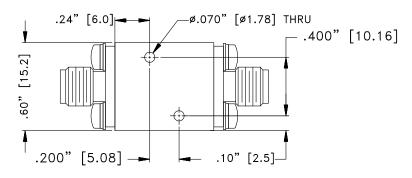


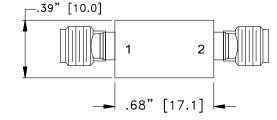
 50Ω 2700 to 14500 MHz 2.92mm Female

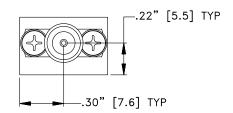
CONNECTOR DESCRIPTION

| Function | Marking on Unit | Connector | |
|------------------|-----------------|---------------|--|
| RF1 ¹ | 1 | 2.92mm Female | |
| RF2 ¹ | 2 | 2.92mm Female | |

CASE STYLE DRAWING







Unit weight: 24grams

Dimensions are in inches (mm). Tolerances: 2 Pl.±.050"; 3 Pl.±.015"

PRODUCT MARKING*: ZHFG-K2500+

*Marking may contain other features or characters for internal lot control.



ZHFG-K2500+

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

CLICK HERE

| | Data |
|---------------------------|--|
| Performance Data & Graphs | Graphs |
| | S-Parameter (S2P Files) Data Set (.zip file) |
| Case Style | UK3042 |
| RoHS Status | Compliant |
| Environmental Ratings | ENV124 |

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