

# "High Frequency Ceramic Solutions"

## 2.45/5.512 GHz Diplexer

P/N 2450DP15A5512

Detail Specification: 01/13/2003

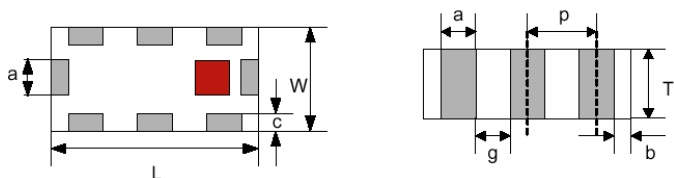
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| Part Number    | Frequency (MHz) | Attenuation Low Band | Attenuation High Band | Return Loss |
|----------------|-----------------|----------------------|-----------------------|-------------|
| 2450DP15A5512_ | 2400 - 2500     | 0.70 dB max.         | 15 dB min.            | 9.5 dB min. |
|                | 5150 - 5875     | 20 dB min.           | 0.9 dB max.           | 9.5 dB min. |

| Input Power | Impedance | Operating Temperature Range | Reel Qty |
|-------------|-----------|-----------------------------|----------|
| 3 Watts max | 50 Ω      | -40 to +85°C                | 4000     |

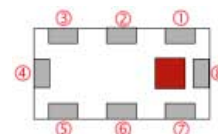
### Mechanical Dimensions

|        | L            | W            | T            | a            | b            | c                   | g            | p            |
|--------|--------------|--------------|--------------|--------------|--------------|---------------------|--------------|--------------|
| Inches | 0.079 ± .004 | 0.049 ± .004 | 0.034 ± .004 | 0.012 ± .004 | 0.008 ± .004 | 0.012 + .004/-0.008 | 0.014 ± .004 | 0.026 ± .002 |
| mm     | 2.0 ± 0.1    | 1.25 ± 0.1   | 0.85 ± 0.1   | 0.30 ± 0.1   | 0.20 ± 0.1   | 0.30+0.1/-0.2       | 0.35 ± 0.1   | 0.65 ± 0.05  |



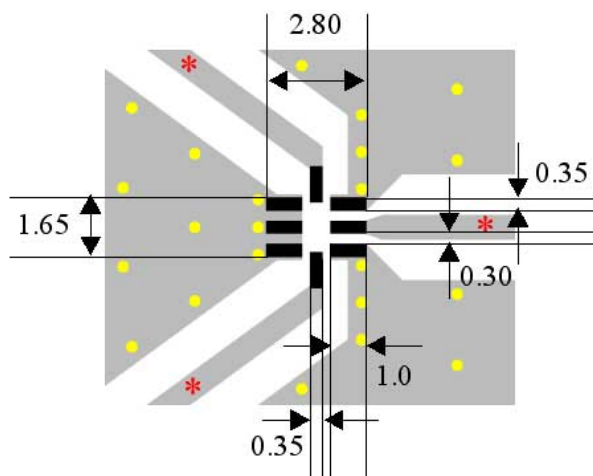
### Terminal Configuration

| No. | Function             | No. | Function            |
|-----|----------------------|-----|---------------------|
| 1   | GND                  | 5   | GND                 |
| 2   | Common Port (P1)     | 6   | GND                 |
| 3   | GND                  | 7   | GND                 |
| 4   | High Freq. Port (P3) | 8   | Low Freq. Port (P2) |



### Mounting Considerations

Mount these devices with brown colored side facing up. Line width should be designed to provide 50Ω impedance matching characteristics.



- Solder Resist
- Land
- Through-hole ( $\phi$  0.35)

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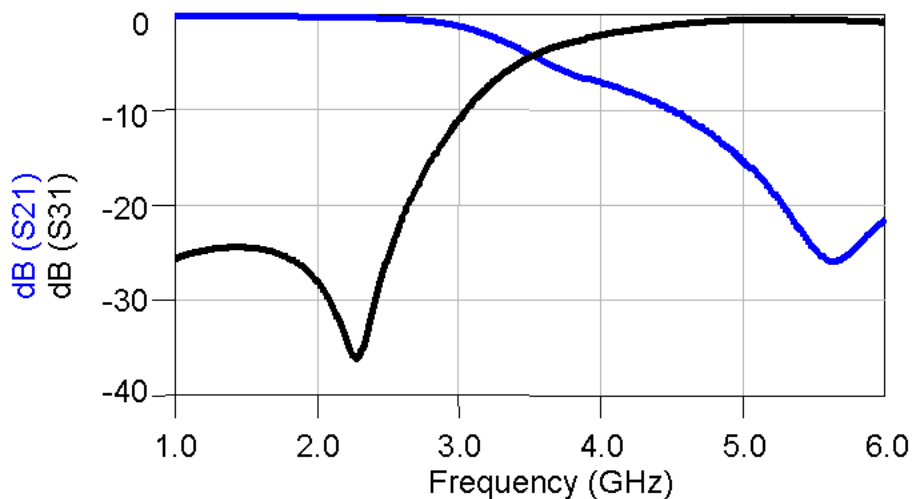
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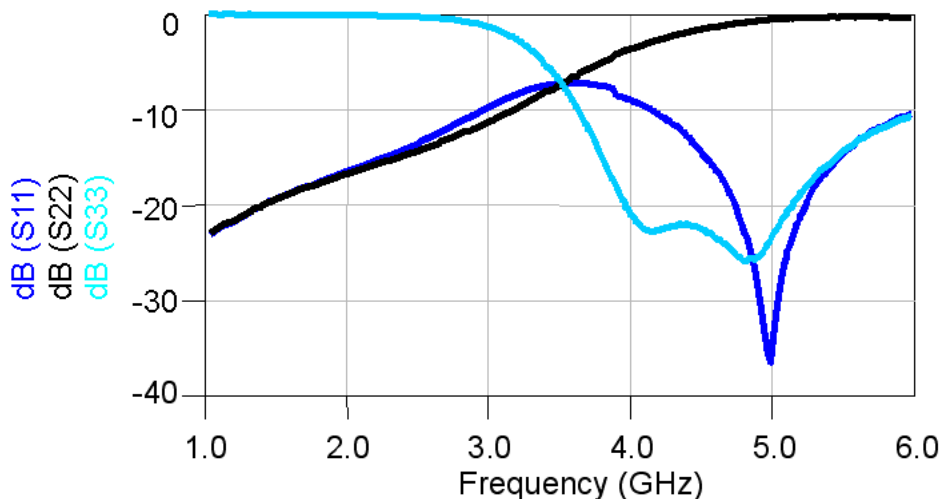
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### Insertion Loss



### Return Loss



For the above graphs: Port 1 is Pin 2  
(Common Port); Port 2 is Pin 8 (Low Band); Port 3 is Pin 4 (High Band)

