## The Big Deal <br> - Low loss ( 0.5 dB ) matching device <br> - Wideband coverage, $1-2500 \mathrm{MHz}$ <br> - Blocks DC <br> - Connectorized package

## Product Overview

Z7550-FMSFDC+ is a DC Blocking matching transformer that allows impedance matching between $50 \Omega$ and $75 \Omega$ systems with minimum reflection in to the circuit. This matching transformer will find its application in any system where $50 \Omega-75 \Omega$ matching is required

Key Features

| Feature | Advantages |
| :--- | :--- |
| Low insertion loss | Low insertion loss ensures minimum signal loss through the device and at the same time provides 50- <br> 75 impedance transformation. |
| Very good return loss | Return loss of 20dB ensures minimum reflection with maximum power transfer |
| Connectorized package | The connectorized package is easy to interface with other devices and well suited for test setups. |

[^0]$\underset{\text { Operating Temperature }}{\text { Maxims }}$

| Operating Temperature | $-55^{\circ} \mathrm{C}$ to $100^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $100^{\circ} \mathrm{C}$ |
| Permanent damage may occur if any of these limits are exceeded. |  |

## Coaxial Connections

Input
SMA-Female
Output

## Outline Drawing



SMA FEMALE CONN $\varnothing G$ Thru TYp F MALE CONN


## Outline Dimensions $\binom{$ inch }{mm}

| A | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 . 2 5}$ | $\mathbf{1 . 2 5}$ | . $\mathbf{9 4}$ | . $\mathbf{6 3}$ | . $\mathbf{4 7}$ |
| 31.75 | 31.75 | 23.88 | 16.00 | 11.94 |
|  |  |  |  | $\mathbf{w t}$ |
| $\mathbf{F}$ | $\mathbf{G}$ | $\mathbf{H}$ |  | grams |
| $\mathbf{1 . 0 0 0}$ | $\mathbf{. 1 2 5}$ | $\mathbf{. 1 2 5}$ |  | 49.8 |

## Features

- Low loss ( 0.5 dB ) matching device
- Wideband coverage, 1-2500MHz
- Blocks DC
- Connectorized package

Applications

- Impedance matching


CASE STYLE: H795-3
Connectors Model
$75 \Omega$ F-M Z7550-FMSFDC + $50 \Omega$ S-F
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at $25^{\circ} \mathrm{C}$

| Parameter | Frequency (MHz) | Min. | Typ. | Max. | Unit |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency Range | - | 1 | - | 2500 | MHz |
| Insertion Loss | $1-950$ | - | 0.35 | 0.8 |  |
|  | $950-2500$ | - | 0.5 | 1.0 | dB |
| Power | $1-950$ | - | 1.5 | 1.8 | $: 1$ |
|  | $950-2500$ | - | 1.2 | 1.5 |  |

Typical Performance Data

| Frequency <br> (MHz) | Insertion Loss <br> (dB) | VSWR |  |
| :---: | :---: | :---: | :---: |
|  |  | $\mathbf{5 0 \Omega}$ | $\mathbf{7 5 \Omega}$ |
| 1 | 0.01 |  |  |
| 10 | 0.01 | 1.50 | 1.47 |
| 100 | 0.06 | 1.50 | 1.46 |
| 250 | 0.17 | 1.48 | 1.45 |
| 300 | 0.21 | 1.47 | 1.46 |
| 950 | 0.20 | 1.21 | 1.47 |
| 1500 | 0.22 | 1.12 | 1.18 |
| 2150 | 0.31 | 1.07 | 1.16 |
| 2300 | 0.33 | 1.08 | 1.09 |
| 2500 | 0.36 | 1.17 | 1.14 |
|  |  |  | 1.18 |




Functional Schematic
Config. Q


Notes
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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