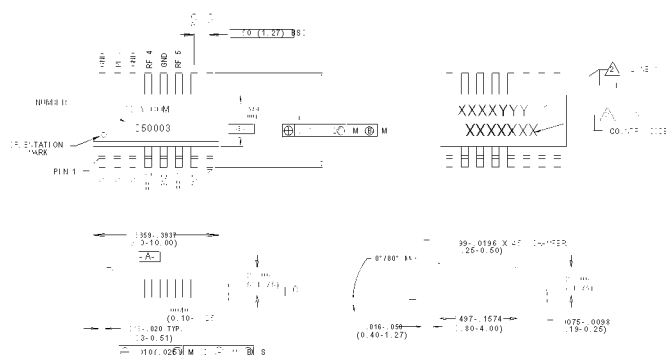




## Preliminary Specifications

**SOIC-16**

- Small Size, Low Profile
- Superior Repeatability ( Lot-to-Lot Variation)
- Industry Standard SOIC-16 SMT Plastic Package
- Typical Isolation: 28 dB
- Typical Insertion Loss: 0.7 dB
- Low Cost
- 1 Watt Power Handling



## Ordering Information

Part Number	Package
DS55-0003	SOIC-16 Lead Plastic Package
DS55-0003-TR	Forward Tape and Reel <sup>1</sup>
DS55-0003-RTR	Reverse Tape and Reel <sup>1</sup>

1. If specific reel size is required, consult factory for part number assignment.

### Typical Electrical Specifications<sup>1</sup>, T<sub>A</sub> = +25°C

Parameters	Units	Min.	Typ.	Max.
Insertion Loss Above 7.0 dB	dB	—	0.7	1.2
Isolation	dB	20	28	—
VSWR    Input	—	—	1.5:1	1.6:1
Output	—	—	1.2:1	1.5:1
Amplitude Balance	dB	—	0.2	0.5
Phase Balance	°	—	6	12

1. All specifications apply with a 50-ohm source and load impedance.

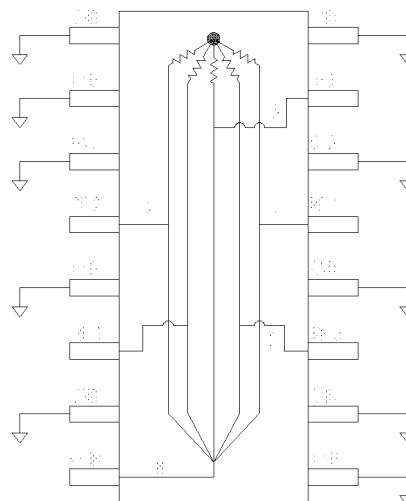
Absolute Maximum Ratings<sup>1</sup>

Parameter	Absolute Maximum
Input Power <sup>2</sup>	1W CW
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to 150°C

1. Exceeding these limits may cause permanent damage.

2. With internal load dissipation of 0.125 W maximum.

## Functional Diagram

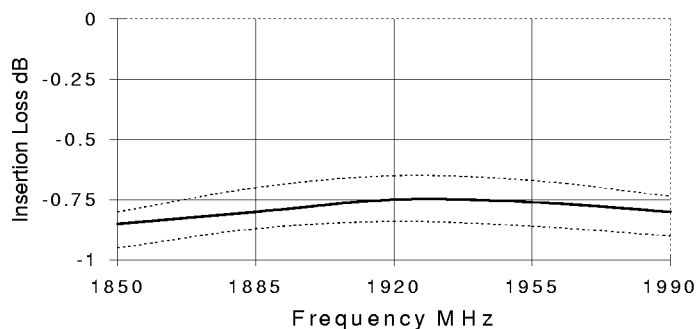


Pins labeled as ground should be DC and RF grounded.

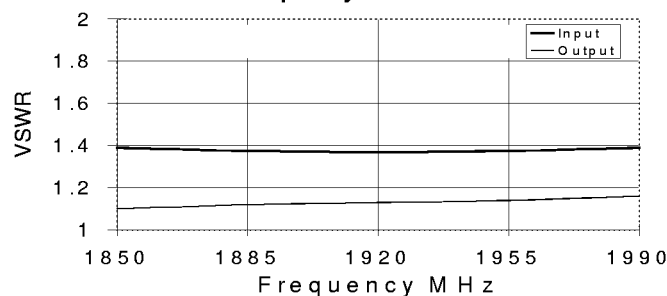
## Typical Performance @ +25°C

## Insertion Loss vs. Frequency

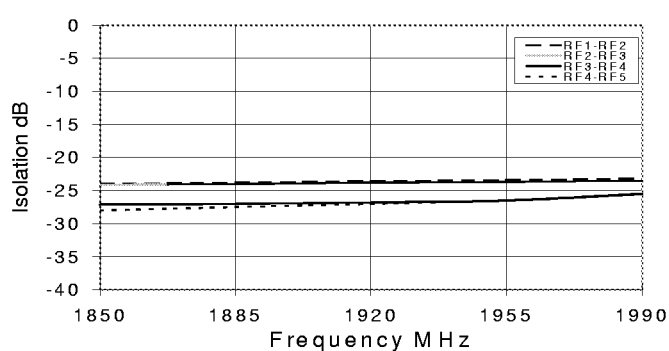
(Dashed lines show amplitude balance window)



## VSWR vs. Frequency



## Isolation vs. Frequency



## Phase Balance vs. Frequency

(Relative to RF1)

