

Features

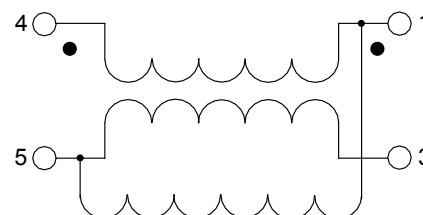
- 1:1 Impedance Ratio
- Surface Mount Package
- Tape and Reel Packaging Available
- RoHS* Compliant & 260°C Reflow Compatible

Description

The MABA-009602-ES2922 is a RoHS compliant 1:1 RF transmission line transformer in a surface mount package (SM-22).

Typical applications include single to balanced mode conversion.

Schematic



Pin Configuration

| Pin # | Function | Pin # | Function |
|-------|----------------|-------|----------|
| 1 | Output Thru | 4 | Input |
| 2 | No Connection | 5 | Ground |
| 3 | Output Coupled | | |

Electrical Specifications: Freq. = 50 - 1200 MHz, T_A = 25°C, Z₀ = 50 Ω, P_{IN} = 0 dBm

| Parameter | Freq. Test Conditions (MHz) | Units | Min. | Typ. | Max. |
|-------------------|-----------------------------|-------|------|------|------|
| Insertion Loss | 50 - 600 | dB | — | 0.5 | 1.0 |
| | 600 - 1200 | | | 1.0 | 2.0 |
| Amplitude Balance | 50 - 600 | dB | — | 0.1 | 0.3 |
| | 600 - 1200 | | | 0.5 | 1.0 |
| Phase Balance | 50 - 600 | ° | — | 1.0 | 3.0 |
| | 600 - 1200 | | | 4.0 | 13.0 |

Ordering Information

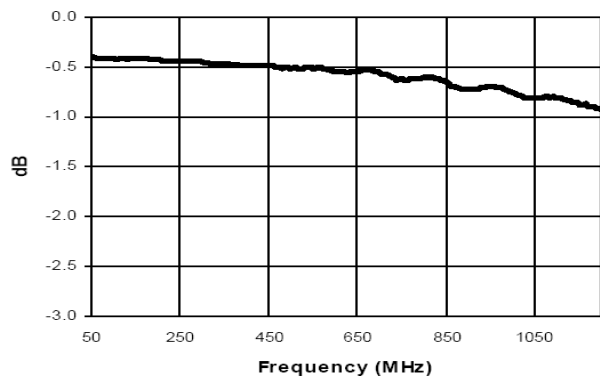
| Parameter | Package |
|--------------------|-----------------|
| MABA-009602-ES2922 | 2000 piece reel |

Absolute Maximum Ratings

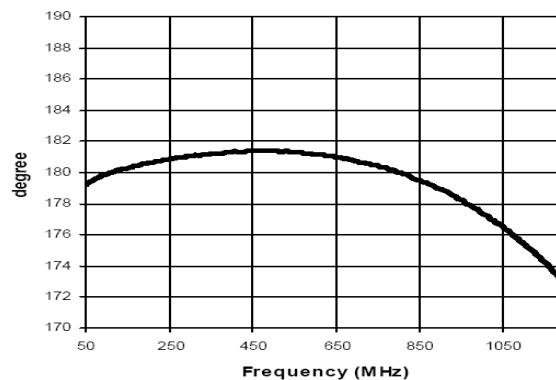
| Parameter | Absolute Maximum |
|-----------------------|------------------|
| RF Power | 250 mW |
| DC Current | 50 mA |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -55°C to +125°C |

Typical Performance Curves

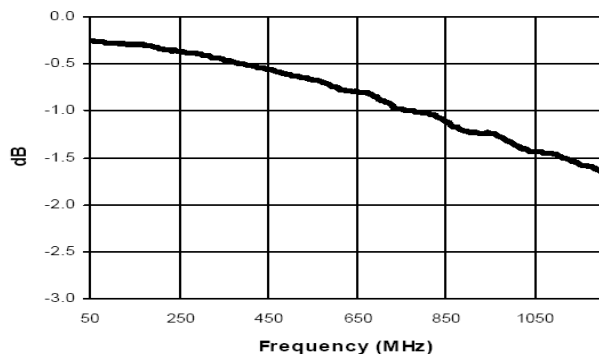
Insertion Loss Pin 4-1



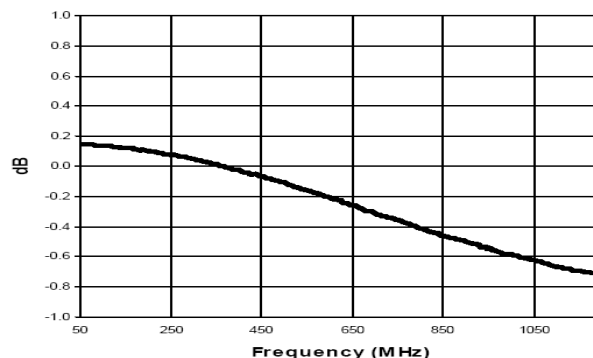
Phase Imbalance



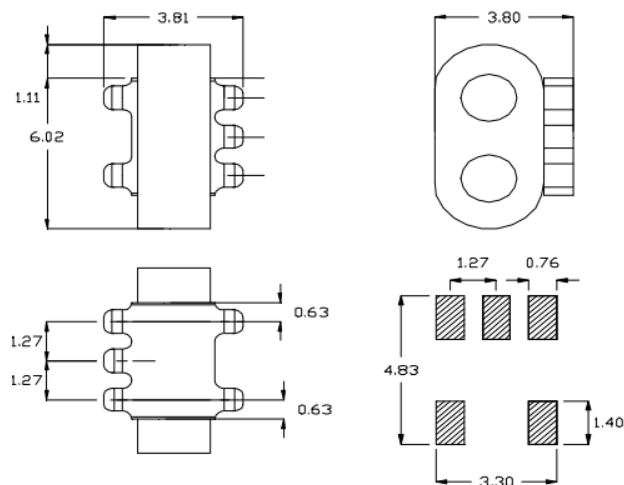
Insertion Loss Pin 4-3



Amplitude Imbalance

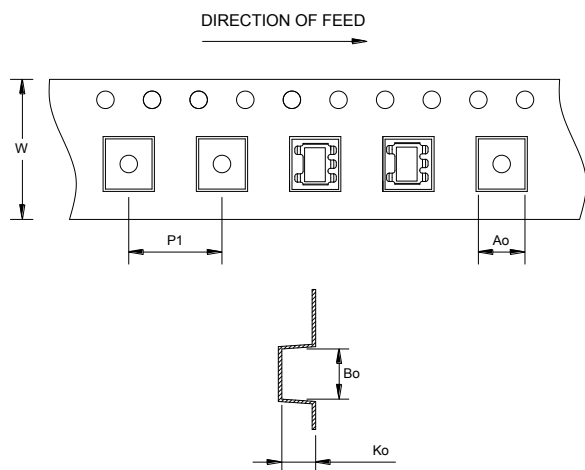


Case Style SM-22



Dimensions are inches (millimeters) ± 0.015 (0.38) unless otherwise specified.
 Drawing not to scale.

Tape & Reel Information



Dimensions

| Item | Dimension (mm) |
|----------------|----------------|
| A _o | 4.10 +/-0.1 |
| B _o | 6.50 +/-0.1 |
| K _o | 4.00 +/-0.1 |
| W | 16.00 +/-0.3 |
| P1 | 8.00 +/-0.1 |

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