

Features

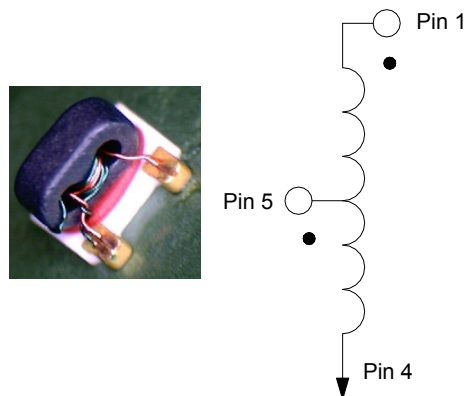
- 4:1 Impedance Ratio (unbalanced to unbalanced)
- Surface Mount Package
- Excellent Temperature Stability
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- Available on Tape and Reel
- Suitable for all CATV, Broadband and FTTx Applications

Description

The MABACT0061 is a 4:1 auto transformer in a surface mount package.

Ideally suited for high volume CATV Broadband applications.

Functional Schematic



Pin Configuration

| Pin # | Function |
|-------|-------------------------------|
| 1 | Secondary Dot (e.g. 200 Ohms) |
| 2, 3 | Not connected (ground) |
| 4 | Primary & Secondary (ground) |
| 5 | Primary Dot (e.g. 50 Ohms) |

Electrical Specifications: Freq. = 5 - 1200 MHz, T_A = +25°C, Z₀ = 50 Ω, P_{IN} = 0 dBm

| Parameter | Frequency Test Conditions (MHz) | Units | Min. | Typ. | Max. |
|-------------------|---------------------------------|-------|------|------|------|
| Impedance Ratio | — | ratio | — | 4:1 | — |
| Insertion Loss | 5 - 600 | dB | — | 1.2 | 1.5 |
| | 600 - 1000 | | | 1.6 | 2.1 |
| | 1000 - 1200 | | | 2.1 | 2.6 |
| Input Return Loss | 5 - 20 | dB | 9 | 11 | — |
| | 20 - 120 | | 11 | 13 | |
| | 120 - 1000 | | 5 | 10 | |
| | 1000 - 1200 | | 4 | 5 | |

Ordering Information

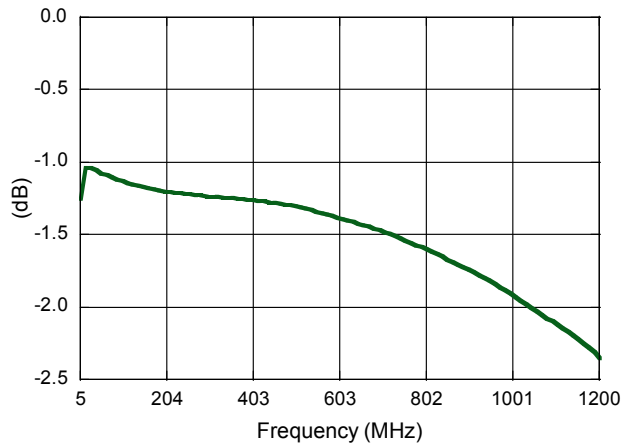
| Part Number | Package |
|-------------|-----------------|
| MABACT0061 | 2000 piece reel |

Recommended Maximum Ratings

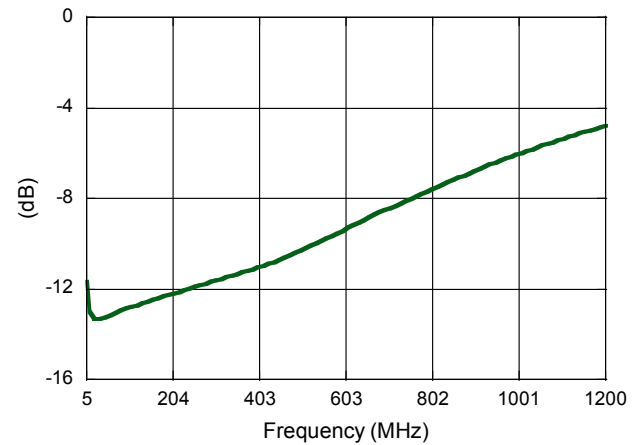
| Parameter | Units |
|-----------------------|-----------------|
| RF Input Power | 250 mW |
| DC Current | 240 mA |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -55°C to +100°C |

Typical Performance Curves

Insertion Loss (Pin 5 to Pin 1)

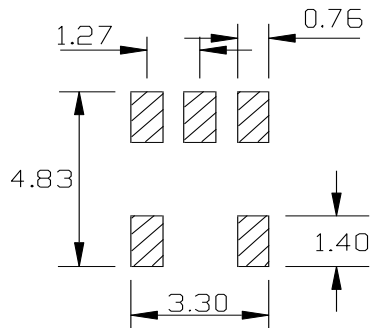


Input Return Loss

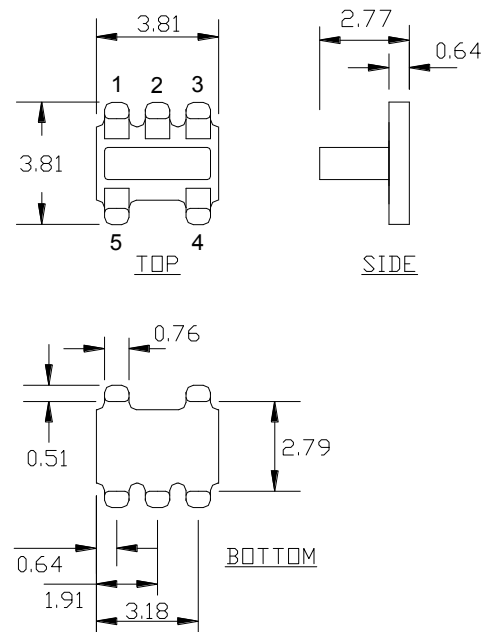


Full temperature plots available on request.

Recommended PCB Configuration



Outline Drawing (SM-22)



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

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