

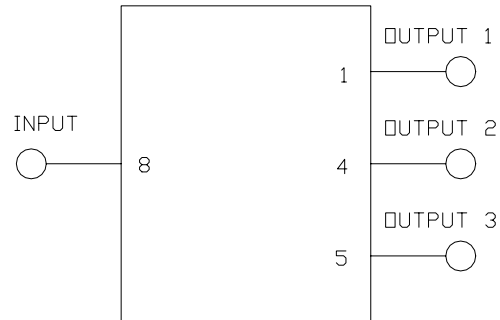
Features

- SMT unit
- 3 Way 0 Degree Power Divider
- Excellent Temperature Stability
- Tape and Reel

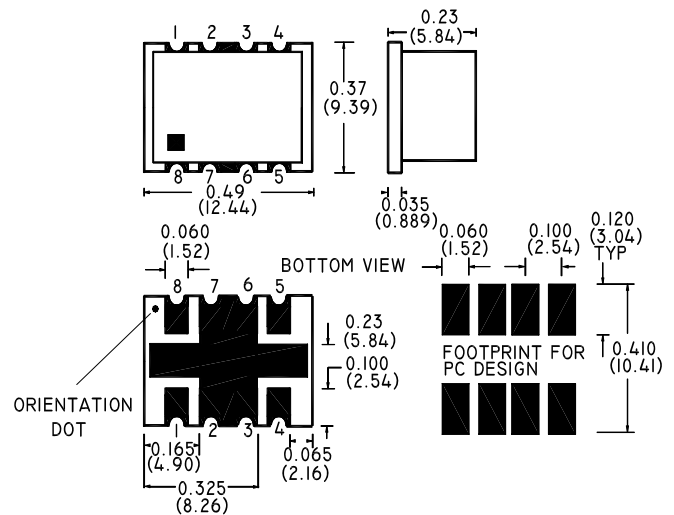
Description

M/A-COM Technology Solutions MAPDCT0017 is a 3 Way 0° Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV & VSAT applications. No external components are required with this product

Schematic



Component Dimensions:



Pin Configuration

| Function | Pin Number |
|----------|------------|
| Input | 8 |
| Output 1 | 1 |
| Output 2 | 4 |
| Output 3 | 5 |
| Ground | 2, 3, 6, 7 |

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

| Parameter | Test Conditions | Units | Min. | Typ. | Max. |
|--|-----------------|-------|------|------|------|
| Frequency Range: 46-1200 MHz | MHz | | | | |
| Insertion Loss 1 (pin 8 to 1) * Ref value -4.77dB | 46 – 870 | dB | - | 1.23 | 1.50 |
| | 870 – 1002 | dB | - | 1.50 | 1.80 |
| | 1002 - 1200 | dB | - | 2.23 | 3.20 |
| Insertion Loss 2 (pin 8 to 4) * Ref value -4.77dB | 46 – 870 | dB | - | 1.00 | 1.30 |
| | 870 – 1002 | dB | - | 1.20 | 1.50 |
| | 1002 - 1200 | dB | - | 2.00 | 2.80 |
| Insertion Loss 3 (pin 8 to 5) * Ref value -4.77dB | 46 – 870 | dB | - | 1.50 | 1.80 |
| | 870 – 1002 | dB | - | 1.80 | 2.20 |
| | 1002 - 1200 | dB | - | 2.80 | 3.30 |
| Input Return Loss * | 46 – 405 | dB | 20 | 25 | - |
| | 405 – 1002 | dB | 17.5 | 20 | - |
| | 1002 – 1200 | dB | 11 | 18 | - |
| Output return Loss 1 & 2* (Pin 1, 4) | 46 - 1200 | dB | 20 | 25 | - |
| Output return Loss 3 * (Pin 5) | 46 – 740 | dB | 20 | 25 | - |
| | 740 – 1002 | dB | 17 | 20 | - |
| | 1002 - 1200 | dB | 14 | 18 | - |
| Isolation between outputs | 46 - 1002 | dB | 20 | 25 | - |
| | 1002 - 1200 | dB | 18 | 24 | - |
| Amplitude Unbalance Output 1 to Output 2 (pin 1, 4) | 46 - 1002 | dB | - | 0.3 | 0.5 |
| Amplitude Unbalance Output 1 to Output 3 (pin 1, 5) | 46 - 1002 | dB | - | -0.3 | -0.5 |
| Phase Unbalance | 50 – 1200 | ° | -4.0 | 3.0 | 4.0 |

* Monitored during production tune/test

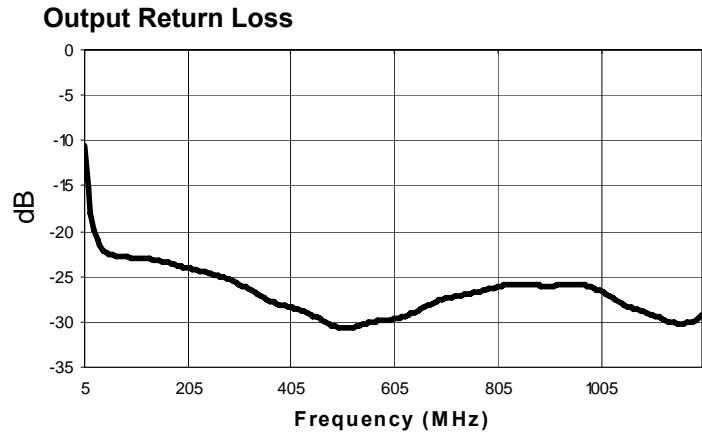
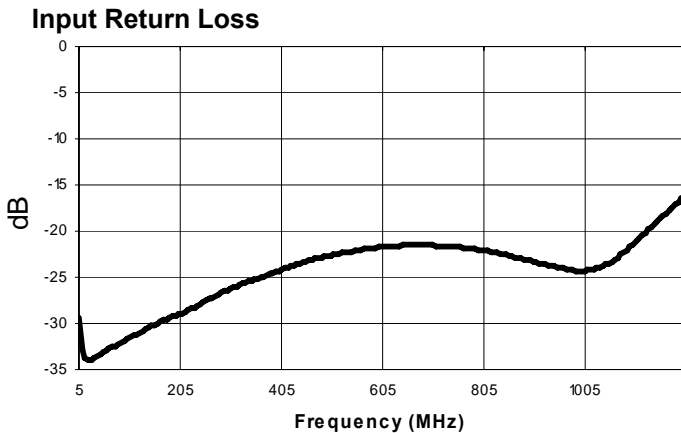
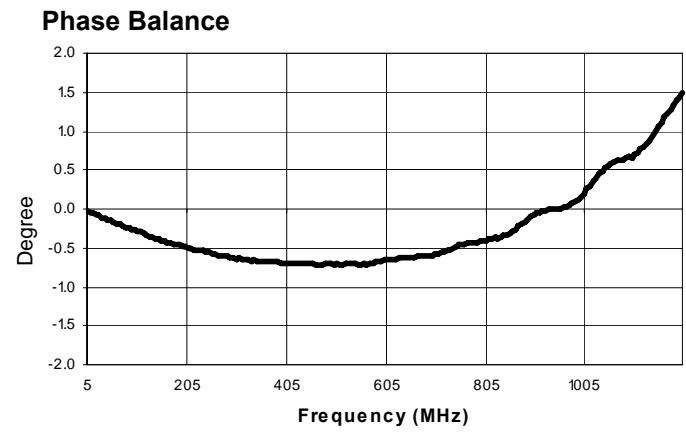
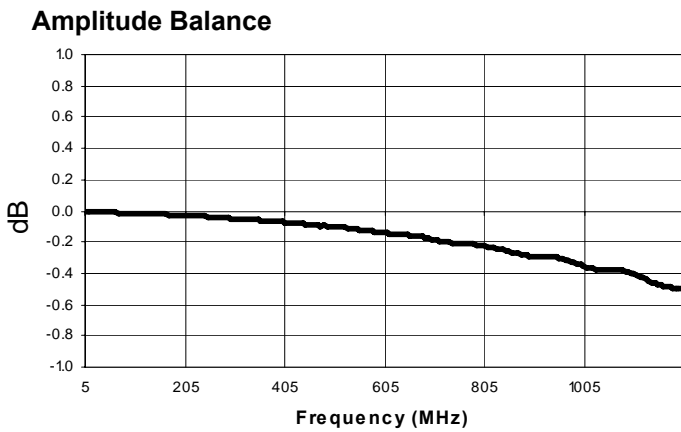
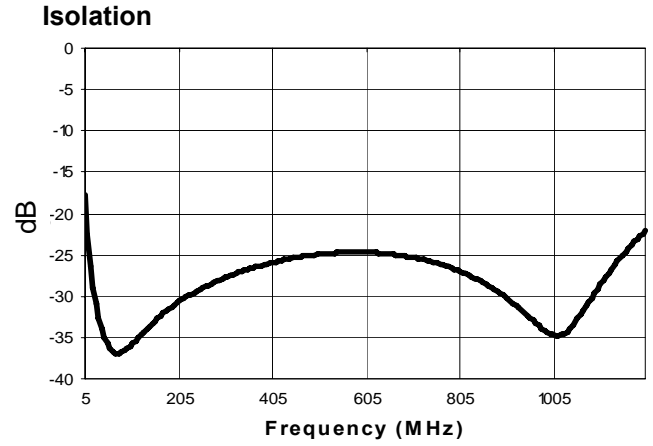
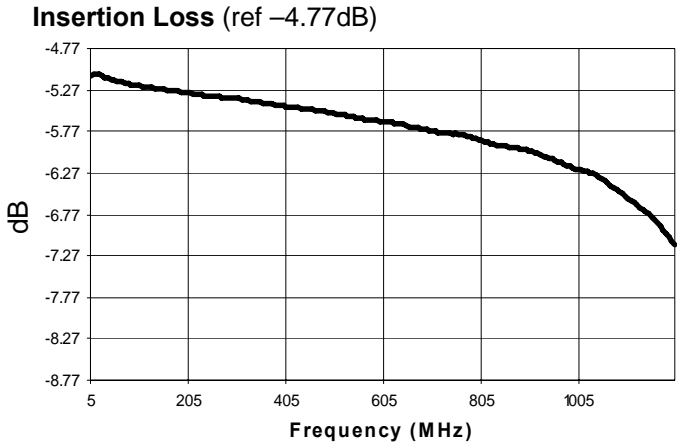
Recommended Maximum Ratings ^{1,2}

| Parameter | Value |
|-------------------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Operating/Storage Temperature | -40° C to +85° C |

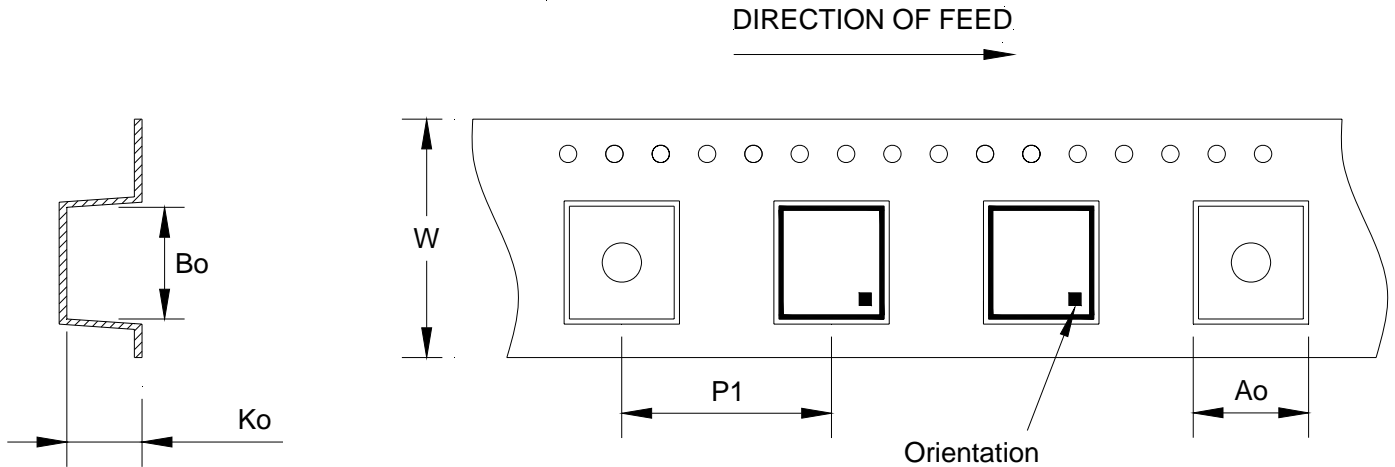
- Exceeding any one or combination of these limits may cause permanent damage to this device.
- M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

**Broadband CATV
3 way 0 Degree Power Divider** Rev. V2

Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$



Tape Specification:



| Item | Dimension |
|------|------------------|
| Ao | 10.26mm +/-0.1mm |
| Bo | 13.46mm +/-0.1mm |
| Ko | 6.10mm +/-0.1mm |
| W | 24.00mm +/-0.3mm |
| P1 | 16.00mm +/-0.1mm |

Ordering Information

| Part Number | Package |
|-------------|---------|
| MAPDCT0017 | 500 |