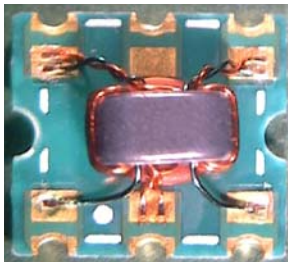


Features

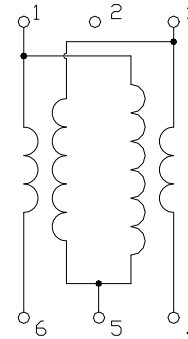
- Surface mount
- 6dB Coupler
- 260°C reflow compatible
- RoHS* compliant, lead-free
- Available on tape and reel.

Description

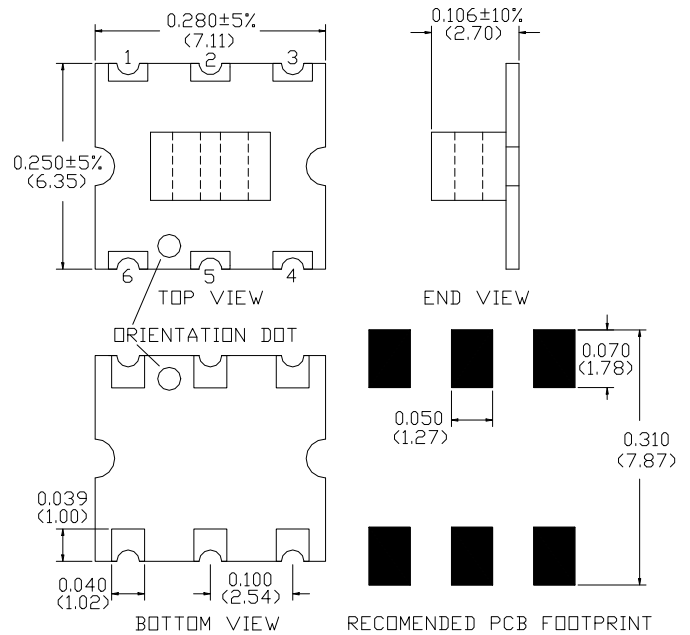
M/A Com's MACP-009730-C60370 is a 6dB coupler in a low cost, surface mount package. Excellent coupling flatness. Ideally suited for broadband CATV applications.



Schematic



Case style: SM-55



Pin configuration

| Pin no. | Function |
|---------|----------------------------|
| 1 | Output |
| 2 | Ground (Not used) |
| 3 | Isolated (75Ω termination) |
| 4 | Coupled |
| 5 | Ground |
| 6 | Input |

Ordering information

| Part number | Description |
|--------------------|---------------------|
| MACP-009730-C60370 | 900 piece reel |
| MACP-009730-C603TB | Customer Test Board |

Note: Reference Application Note **M513** for reel size information.

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

1

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Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

| Parameter | Test Conditions | Units | Min | Typ | Max |
|----------------------|-----------------|-------|-----|-----|-----------|
| Coupling | 5 - 1200 MHz | dB | - | 5.8 | ± 0.5 |
| Main Line Loss | 5 - 400 MHz | dB | - | 2.3 | 2.5 |
| | 400 - 870 MHz | dB | - | 2.5 | 3.0 |
| | 870 - 1000 MHz | dB | - | 2.9 | 3.3 |
| | 1000 - 1200MHz | dB | - | 3.3 | 4.0 |
| Directivity | 5 - 50 MHz | dB | 11 | 12 | - |
| | 50 - 600 MHz | dB | 7.0 | 10 | - |
| | 600 - 1000 MHz | dB | 3.0 | 7.2 | - |
| Input Return Loss | 5 - 500MHz | dB | 15 | 17 | - |
| | 500 - 1000 MHz | dB | 11 | 17 | - |
| Output Return Loss | 5 - 500 MHz | dB | 19 | 23 | - |
| | 500 - 1000 MHz | dB | 13 | 18 | - |
| Coupling Return Loss | 5 - 500 MHz | dB | 12 | 14 | - |
| | 500 - 1000 MHz | dB | 9.0 | 12 | - |

Absolute Maximum Ratings ^{1,2}

| Parameter | Absolute maximum |
|-----------------------|------------------|
| RF power | 250mW |
| DC current | 30mA |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -40°C to +85°C |

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

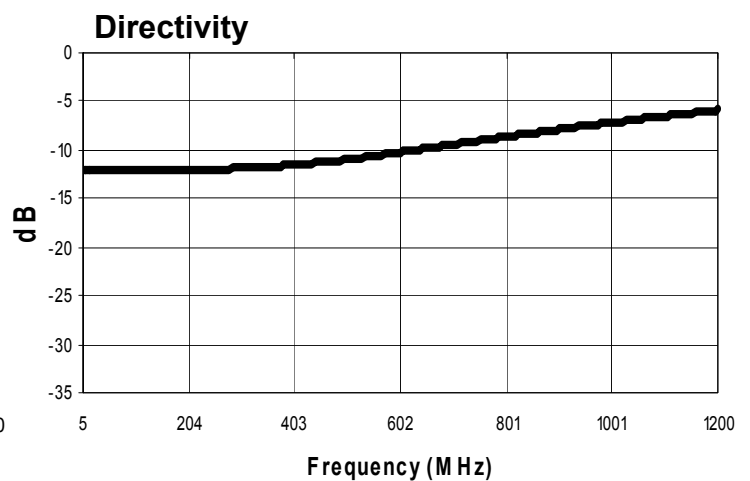
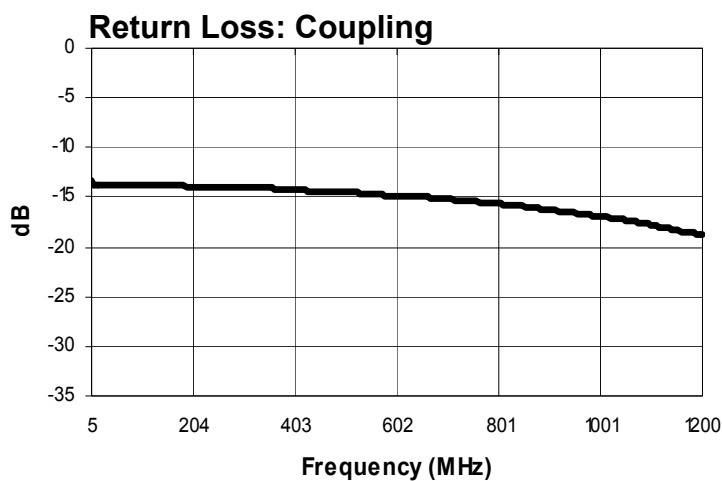
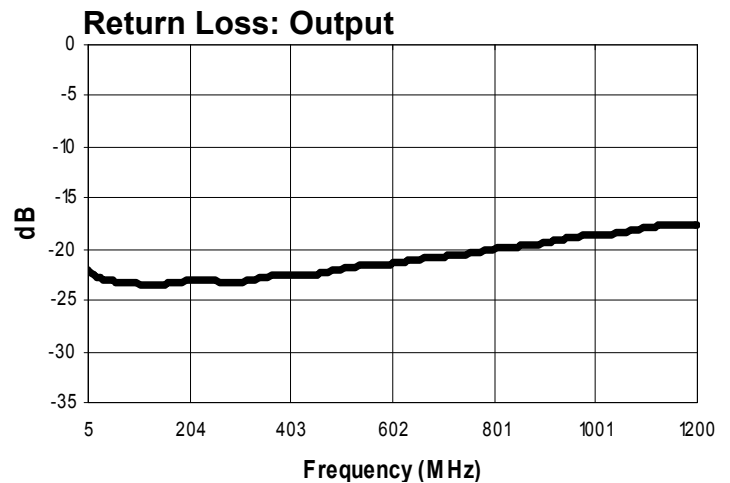
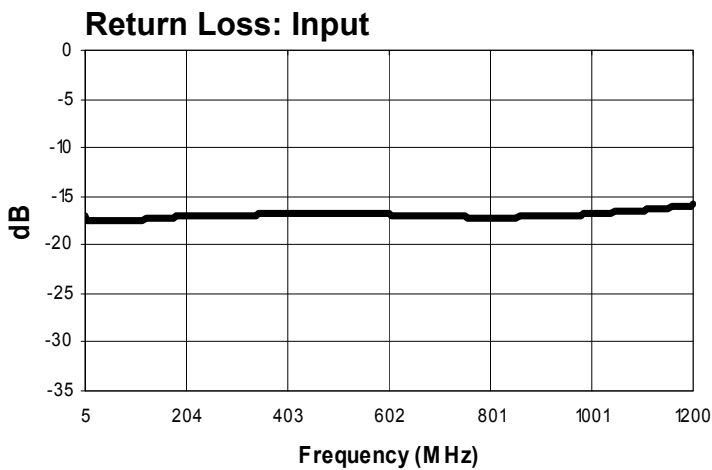
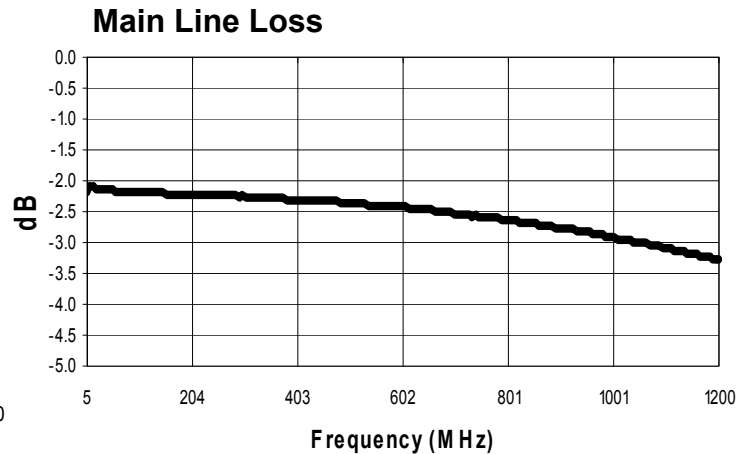
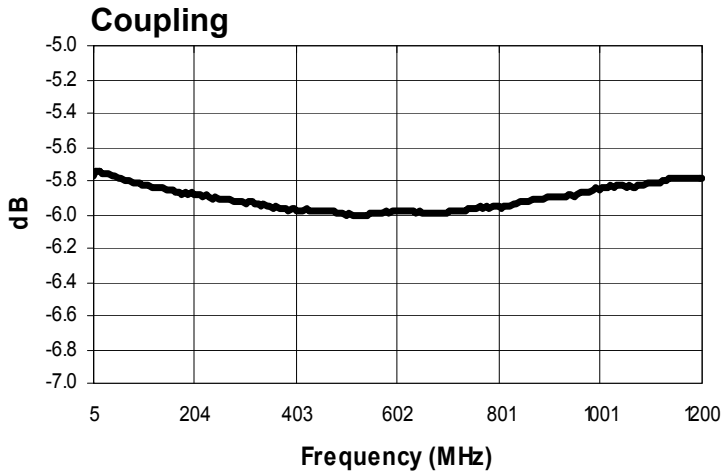
MACP-009730-C60370



E-Series 6dB Coupler
5 to 1200 MHz

M/A-COM Products
Rev. V1

Typical Performance Curves: $T_A = 25^\circ\text{C}$, 0dBm , $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$



3

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