

2 way 90 degree power splitter 5 - 250 MHz

Rev. V1

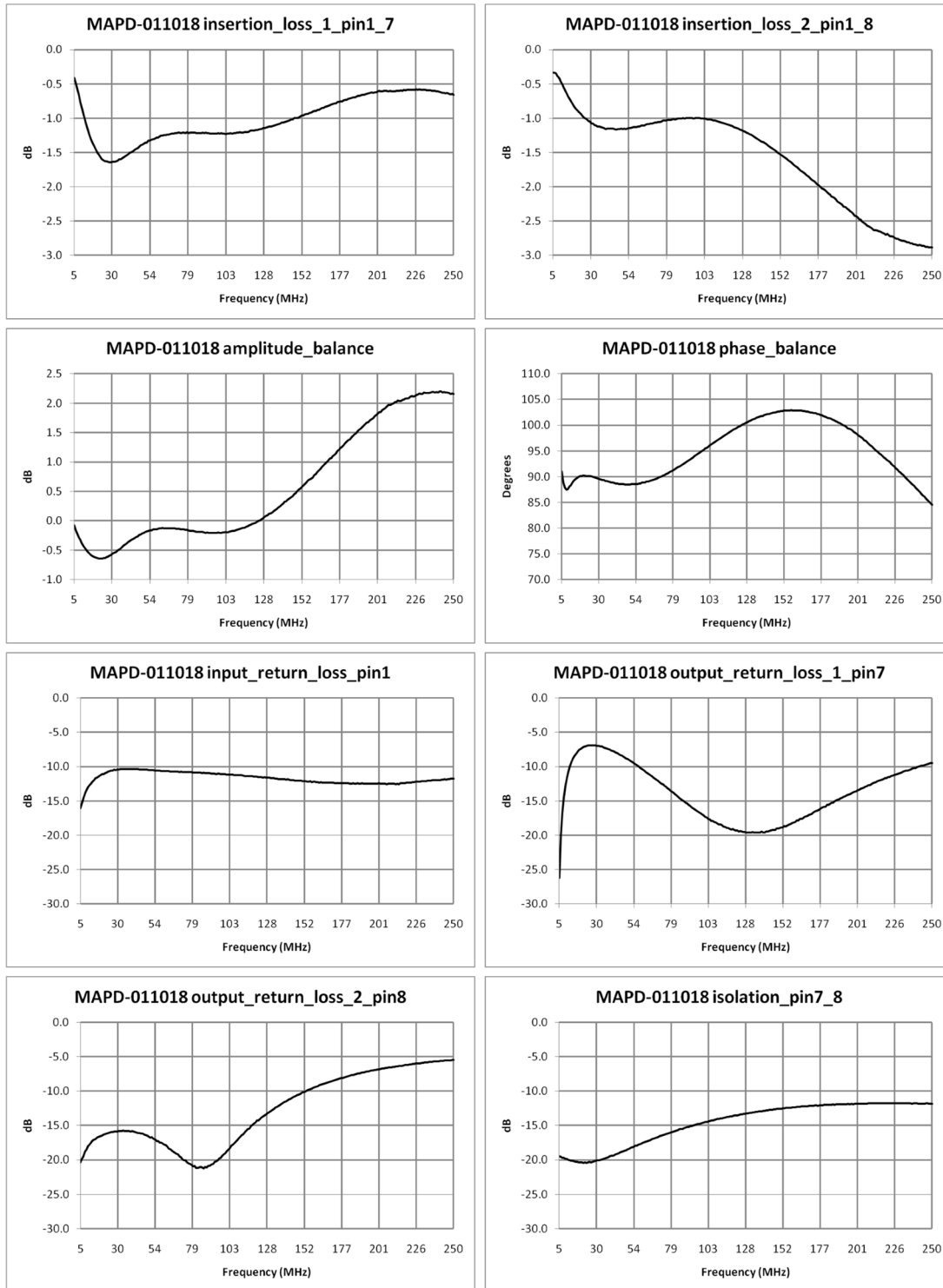
Features

- 2 way 90 degree
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- RoHS Compliant, lead-free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTx applications.



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

| Parameter | Conditions | Units | Min | Typ | Max |
|---------------------------------|--------------|----------|-----|-------|-----------|
| Frequency Range | | MHz | 5 | | 250 |
| Impedance | | Ω | | 75 | |
| Insertion Loss (Pin1 - Pin7) | 5 - 85 MHz | dB | - | 1.5 | 1.9 |
| | 85 - 250 MHz | dB | - | 1.2 | 1.9 |
| Insertion Loss (Pin1 - Pin8) | 5 - 85 MHz | dB | - | 1.16 | 1.4 |
| | 85 - 250 MHz | dB | - | 1.02 | 3.5 |
| Amplitude Balance | 5 - 85 MHz | dB | - | 0.4 | ± 0.8 |
| | 85 - 250 MHz | dB | - | 0.2 | ± 2.9 |
| Phase Balance | 5 - 85 MHz | $^\circ$ | - | 90.0 | ± 3 |
| | 85 - 100 MHz | $^\circ$ | - | 94.3 | ± 9 |
| | 100 - 250MHz | $^\circ$ | - | 101.8 | ± 17 |
| Input Return Loss (Pin1) | 5 - 85 MHz | dB | 9 | 10.3 | - |
| | 85 - 250 MHz | dB | 9 | 11.1 | - |
| Output Return Loss (Pin7) | 5 - 85 MHz | dB | 6 | 7.7 | - |
| | 85 - 250 MHz | dB | 6 | 16.9 | - |
| Output Return Loss (Pin8) | 5 - 85 MHz | dB | 14 | 16.2 | - |
| | 85 - 250 MHz | dB | 4 | 20.5 | - |
| Isolation (Pin7 - Pin8) | 5 - 85 MHz | dB | 15 | 19.4 | - |
| | 85 - 250 MHz | dB | 10 | 17.9 | - |

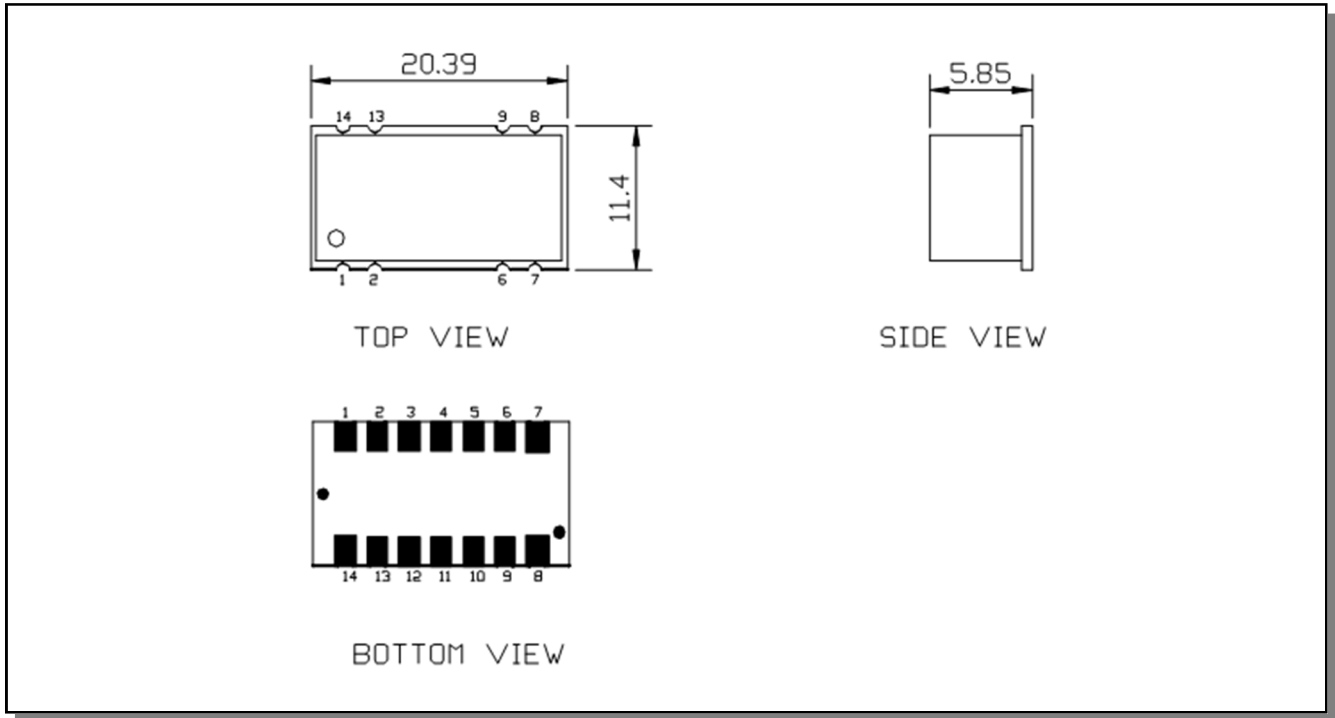


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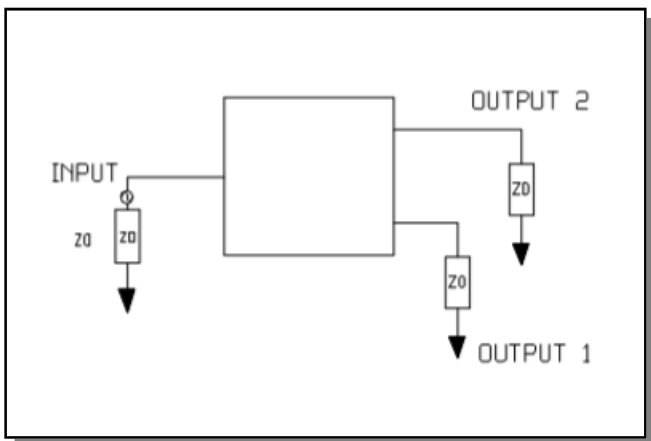
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Outline Drawing

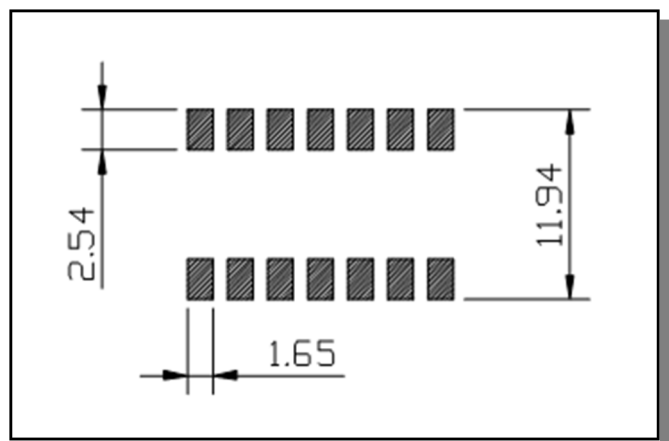


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Plating finish: ENIG

Recommended



Recommended Footprint



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Tape & Reel Information

| Parameter | Units | Value |
|--|-------|-------|
| Qty per reel | - | 400 |
| Reel Size | mm | 330 |
| Tape Width | mm | 44.00 |
| Pitch | mm | 20.00 |
| Ao | mm | 21.00 |
| Bo | mm | 12.00 |
| Ko | mm | 6.40 |
| Orientation | - | F30 |
| Reference Application Note ANI-019 for orientation | | |

Ordering Information

| Part Number | Description |
|----------------|---------------------------|
| MAPD-011018 | Tape & Reel |
| MAPD-011018-TB | Customer Evaluation Board |

Recommended Maximum Ratings

| Parameter | Units | Min | Max |
|-----------------------------|-------|-----|-----|
| Input Power | mW | | 250 |
| DC Current | mA | | 200 |
| Operating Temperature Range | °C | -40 | +85 |

Full temperature plots available on request

Pin Configuration

| Pin No. | Function |
|------------------|----------|
| 1 | Input |
| 7 | Output 1 |
| 8 | Output 2 |
| 2,3,4,5,6 | Ground |
| 9,10,11,12,13,14 | Ground |

Schematic

