

E-Series Coupler 350 – 450 MHz

MACP-007984-MDC201
V1P

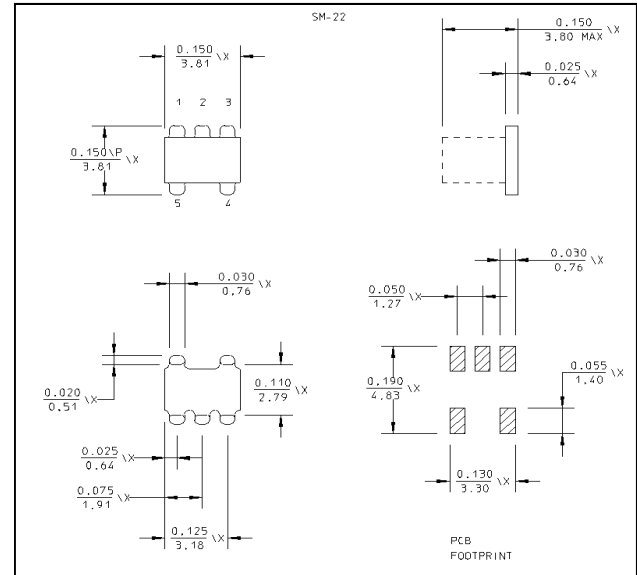
Features

- Coupling 20 dB Typical
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS* compliant version of the EMDC-20-1

Description

M/A-COM's MACP-007984-MDC201 is a RoHS Compliant broadband coupler in a low cost, surface mount package. It offers low loss, good isolation, good input/output matching and exceptional coupling repeatability. MACP-007984-MDC201 is available in an SM-22 surface mount package and is designed to be utilized in both standard reflow and high temperature soldering reflow profiles. Parts are packaged in tape & reel.

SM - 22 Package



Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
|----------------|-----------------|-----------|-------|-------|-------|--------------|
| RF Frequency | — | 350 - 450 | MHz | — | — | — |
| Coupling | F_L-f_U | 350 - 450 | dB | — | — | 20 ± 1.0 |
| Main Line Loss | F_L-f_U | 350 - 450 | dB | — | 0.25 | 0.5 |
| Directivity | F_L-f_U | 350 - 450 | dB | 14 | 18 | — |
| Return Loss | F_L-f_U | 350 - 450 | Ratio | 1.5:1 | 1.1:1 | — |

Absolute Maximum Ratings¹

| Parameter | Absolute Maximum |
|-----------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -55°C to +125°C |

1. Operation of this device above any one of these parameters may cause permanent damage.

Ordering Information

| Part Number | Package |
|--------------------|---------------------------------|
| MACP-007984-MDC201 | Tape and Reel (2000 piece Reel) |

This PRELIMINARY Data Sheet contains information regarding a product M/A-COM has under development. Performance is based on measured results and target specifications. Commitment to produce in volume is not guaranteed.

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

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ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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RoHS Compliant

E-Series Coupler
350 – 450 MHz



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Pin Configuration

| Pin No. | Function |
|---------|------------------|
| 1 | Coupled |
| 2 | Ground |
| 3 | Input |
| 4 | Output |
| 5 | External 50 Ohms |