

EMDC-10-1

E-Series Coupler
5 – 1000 MHz

Rev. V4

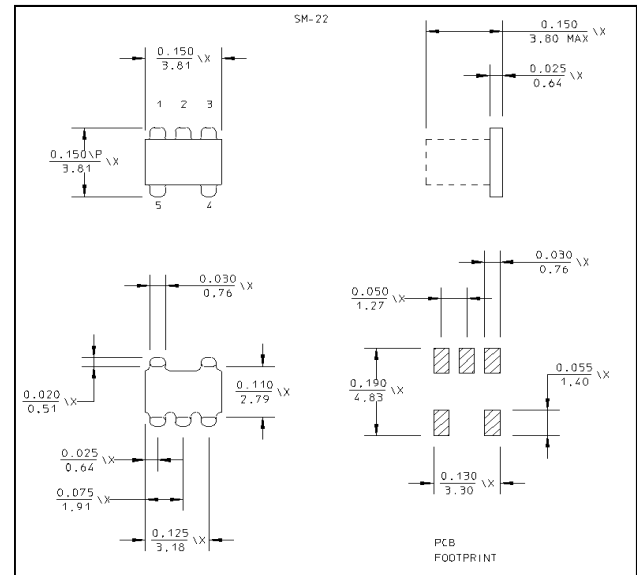
Features

- Coupling 10 dB Typical
- Surface Mount
- Tape and reel packaging available

Description

M/A-COM's EMDC-10-1 is a broadband coupler in a low cost, surface mount package. It offers low loss, good isolation, good input/output matching and exceptional coupling repeatability. Ideally suited for high volume cellular and wireless applications. 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	—	5 - 1000	MHz	—	—	—
Coupling	$F_L - f_U$	5 - 1000	dB	—	—	10 \pm 0.9
Main Line Loss	$F_L - f_U$	5 - 50	dB	—	1.1	1.6
		50 - 500	dB	—	1.0	1.4
		500 - 1000	dB	—	1.2	2.3
Directivity	$F_L - f_U$	5 - 50	dB	17	20	—
		50 - 500	dB	15	19	—
		500 - 1000	dB	10	17	—
Return Loss	$F_L - f_U$	5 - 1000	dB	14	17	—

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
EMDC-10-1TR	Tape and Reel (2000 piece Reel)

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.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
 • **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

Pin Configuration

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