

E-Series 75 Ohm Coupler 5 - 1000 MHz

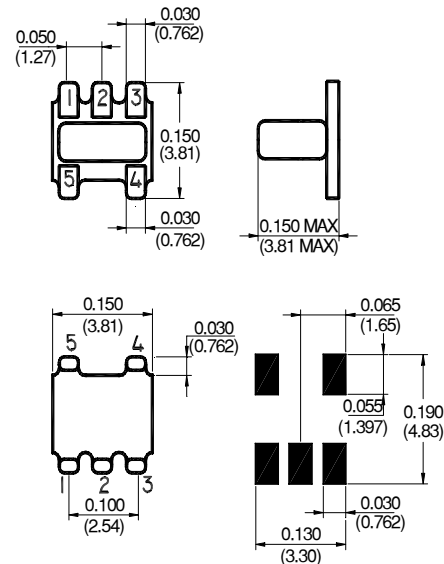


Features

- Coupling 13db Typical
- Surface Mount
- Tape and Reel Packaging available



SM-22 Package



Description

M/A-COM's EMDC-13-1-75 is a high performance 75 Ohm Coupler, in an SM-22, surface mount package. The EMDC-13-1-75 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Cable Amplifiers and Headend equipment.

Electrical Specifications @25°C

Frequency Range 5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss					
5 - 50 MHz	dB	—	1.5	—	2.2
50 - 500 MHz	dB	—	1.3	—	2.0
500 - 1000 MHz	dB	—	1.3	—	2.0
Coupling					
5 - 1000 MHz	dB	13 ± 1.1	—	—	—
Coupling Flatness	dB	—	—	—	0.9
Directivity					
5 - 50 MHz	dB	—	25	20	—
50 - 500 MHz	dB	—	20	15	—
500 - 1000 MHz	dB	—	13	7	—
Return Loss, all Ports					
5 - 1000 MHz	dB	—	14	8	—

Please Note that the photograph above indicates package shape only, unit may be wired differently.

S 1360 D

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.

Absolute Maximum Ratings

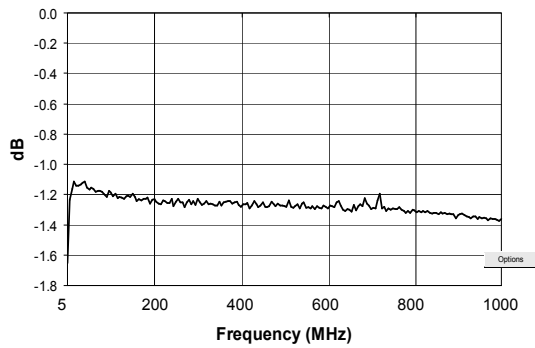
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating/Storage Temperature	-20°C to +85°C

Operating Characteristics

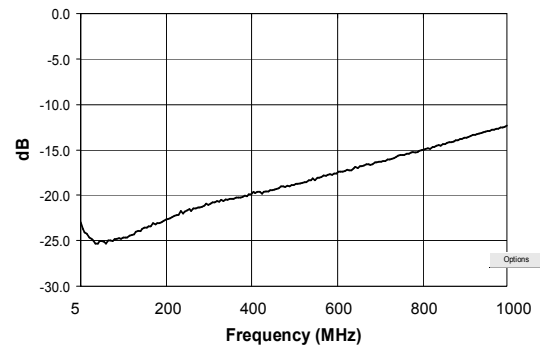
Function	Pin No.
Input	3
Output	4
Coupled	1
Ground	2
Case Ground	—
External 75 Ohms	5
Not Connected	—

Typical Performance @ 25°C

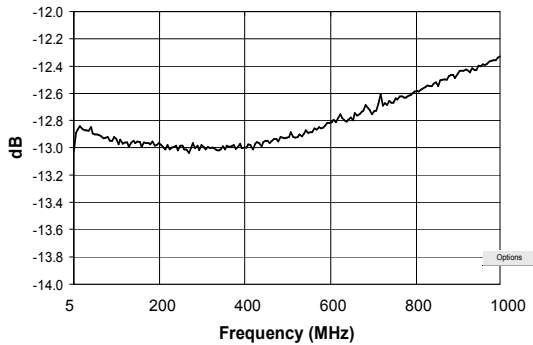
Mainline Loss



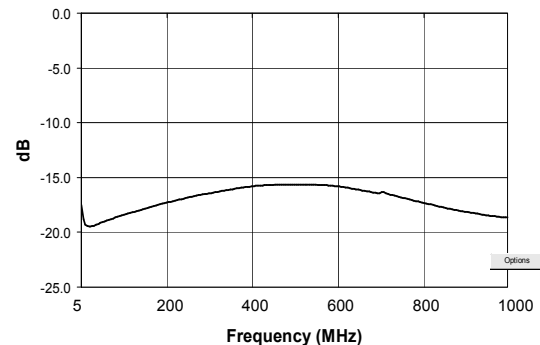
Directivity



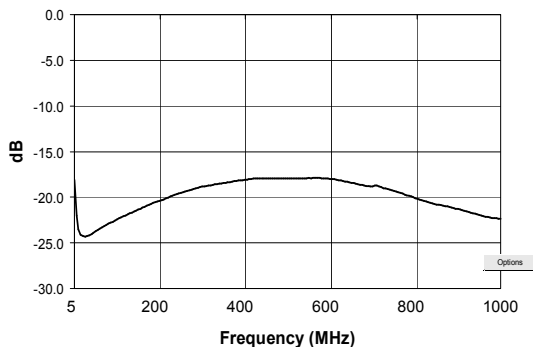
Coupling



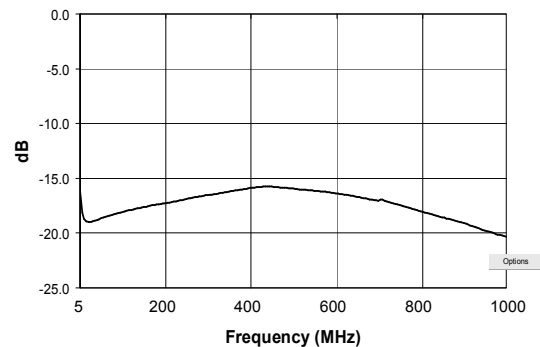
Input Return Loss



Output Return Loss



Coupling Return Loss



S 1360 D

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.