E-Series 75 Ohm Coupler 5 - 862 MHz



Features

- Coupling 16dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



Description

M/A-COM's EMDC-16-8-75 is a high performance 75 Ohm Coupler, in a SM-101 low cost, surface mount package. The EMDC-16-8-75 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Broadband Amplifiers and Headend

Electrical Specifications @25°C, Z₀ = 75 Ohms

4 0.250 (6.35) 0.142+MAX (3.60) 0.300 (7.62) 0.080 (2.03) TYP ORIENTATION DOT TYP (1.27)2 0.060 -(1.50) 0.310 100 BOTTOM VIEW (2.50)TYP (7.87)FOOTPRINT FOR 0,100 PC DESIGN 0.040 (2.54)TYP (1.02)

SM-101 Package

Frequency Range 5 - 862 MHz		Units	Nominal	Typical	Minimum	Maximum
Mainline Loss						
	5 - 862 MHz	dB	—	1.05	—	1.25
Coupling						
	5 - 44 MHz	dB	16	—	_	± 0.5
	45 MHz	dB	16	—	—	± 0.2
	862 MHz	dB	15.6	—	—	± 0.3
Coupling Flatness	5 - 862 MHz	dB	—	—	—	±0.3
Isolation						
	5 - 862 MHz	dB	—	33	29	_
Input Return Loss						
•	5 - 862 MHz	dB	—	25	18	—
Output Return Loss						
•	5 - 862 MHz	dB	—	25	18	—
Coupled Return Loss						
	5 - 862 MHz	dB	_	25	18	_

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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. S 1432 D

• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

• India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.

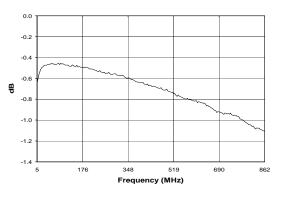
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Operating Characteristics

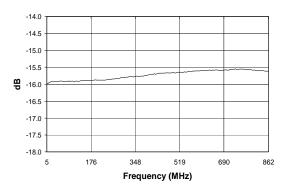
Function	Pin No.		
Input	1		
Output	6		
Coupled	3		
External 75 Ohms	4		
Ground	2		
Not Connected	5		

Typical Performance @ 25°C

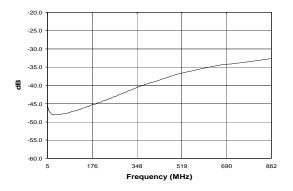
Mainline Loss



Coupling





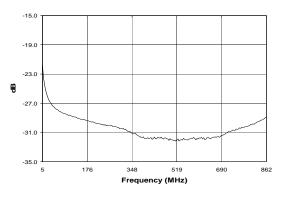


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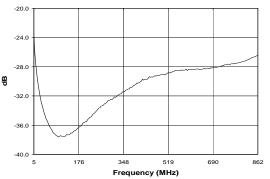
Absolute Maximum Ratings

_				
Parameter	Absolute Maximum			
RF Power	250 mW			
DC Current	30 mA			
Pin Temperature (10 sec)	260°C			
Operating/Storage Temperature	-40°C to +85°C			

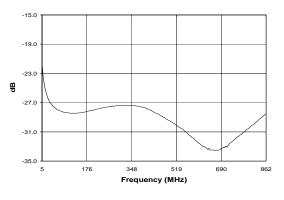




Output Return Loss



Coupled Port Return Loss



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