



16dB 75 Ohm Coupler 5-862MHz EMDC-16-11-75 V4

Features

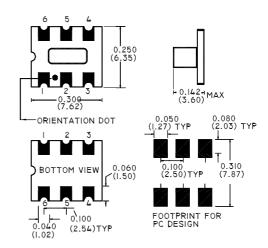
- Surface Mount
- · Coupling 16dB typical
- 260°C Reflow Compatible
- Available on Tape and Reel. Reel quantity 900

Description

M/A-COM's EMDC-16-11-75 is a high performance 75 Ohm Coupler, in a SM-101 low cost, surface mount package. The EMDC-16-11-75 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Broadband Amplifiers and Headend equipment.



Case Style: SM-101



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

Pin Configuration

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

Ordering Information

Part Number	Package		
EMDC-16-11-75TR	900		

Note: Reference Application Note M513 for reel size information.

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

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[•] **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300

[•] Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298





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Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega^{1}$

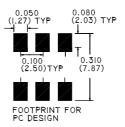
Parameter	Frequency	Units	Min	Тур	Max
Mainline Loss	5 - 862 MHz	dB	-	1.05	1.25
Coupling	5 - 44 MHz 45 MHz 862 MHz	dB dB dB	- - -	16 16 15.6	±0.5 ±0.2 ±0.3
Coupling Flatness	5 - 862 MHz	dB	-	-	±0.3
Isolation	5 - 862 MHz	dB	29	33	-
Input Return Loss	5 - 862 MHz	dB	18	25	-
Output Return Loss	5 - 862 MHz	dB	18	25	-
Coupled Return Loss	5 - 862 MHz	dB	18	25	-

Absolute Maximum Ratings ^{1,2}

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

- Exceeding any one or combination of these limits may cause permanent damage to this device.
- M/A-COM does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration



[•] Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300

Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298



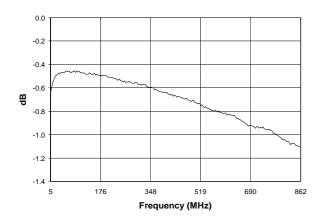


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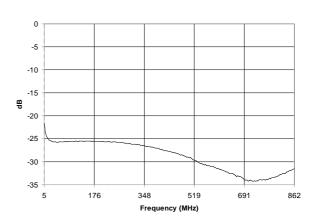
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Typical Performance Curves: $T_A = 25$ °C, $Z_0 = 75\Omega^1$

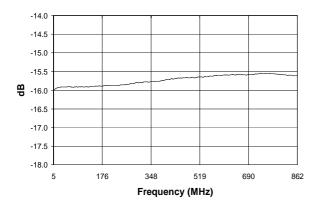
Mainline Loss



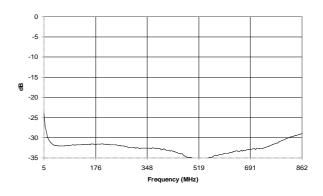
Input Return Loss



Coupling

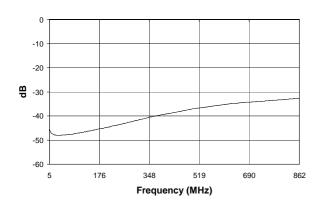


Output Return Loss

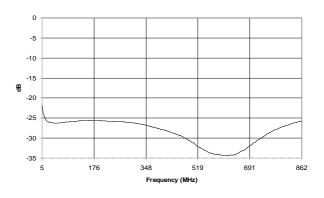


Isolation

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Coupled Port Return Loss



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