

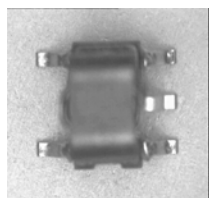
E-Series 75 Ohm Coupler

5 - 1000 MHz

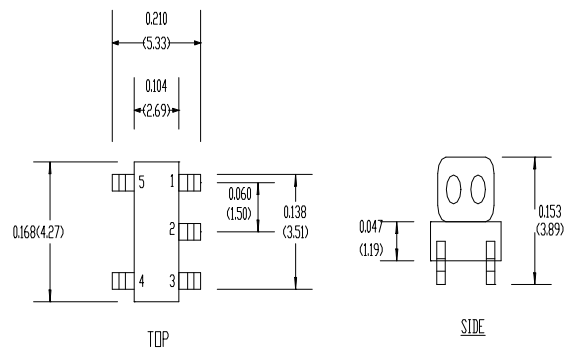


Features

- Coupling +10db Typical
- Surface Mount
- Low Profile
- Excellent Return Loss
- Tape & Reel Packaging available

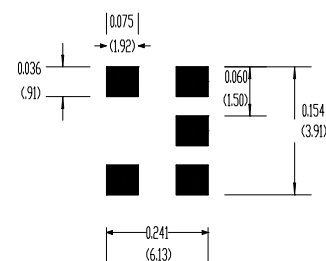
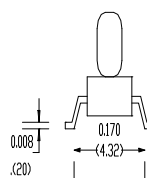


SM-138 Package



Description

M/A-COM's MACPES0034 is a high performance 75 Ohm Coupler, in a SM-138 low cost, surface mount package. The MACPES0034 is designed for use in high volume CATV applications. Typical applications include Settop Boxes, Network Interface Units, Line Amplifiers and Headend equipment.



SUGGEST SOLDER FOOTPRINT

Electrical Specifications @25°C, Z₀ = 75 Ohms

Frequency Range	5 - 870 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss	5 - 500 MHz	dB	—	0.9	—	1.3
	500 - 870 MHz	dB	—	1.2	—	1.5
	500 - 1000 MHz	dB	—	1.6	—	1.8
Coupling	5 - 870 MHz	dB	10	—	—	± 0.5
	870—1000 MHz	dB	10	—	—	± 0.9
Coupling Flatness		dB	—	—	—	1.0
Isolation	5 - 500 MHz	dB	—	30	25	—
	500 - 1000 MHz	dB	—	23	20	—
Input Return Loss	5 - 1000 MHz	dB	—	20	18	—
Output Return Loss	5 - 1000 MHz	dB	—	20	18	—
Coupled Return Loss	5 - 1000 MHz	dB	—	20	18	—

S 1615

V1.0

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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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-40°C to +70°C

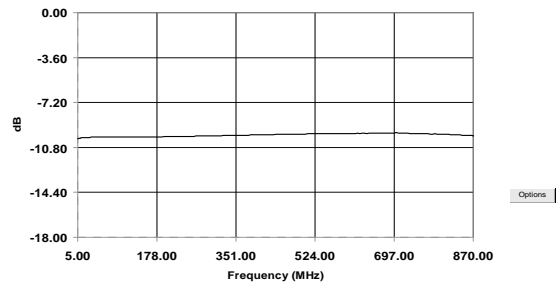
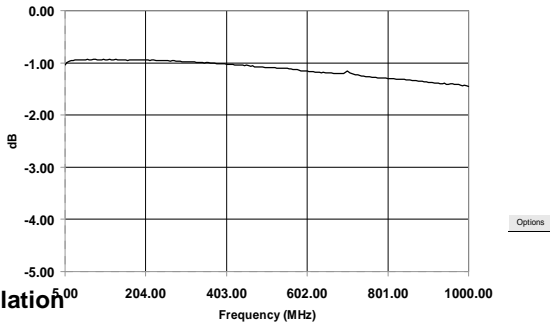
Pin Configuration

Function	Pin No.
Input	1
Output	5
Coupled	3
External 75 Ohms	4
Ground	2

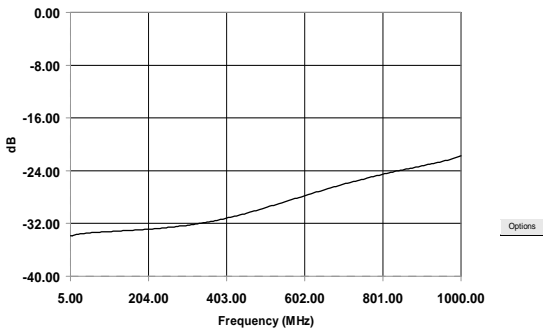
Typical Performance Curves @ +25°C

Coupling

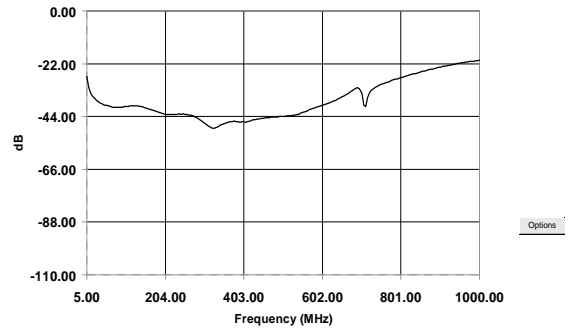
Mainline Loss



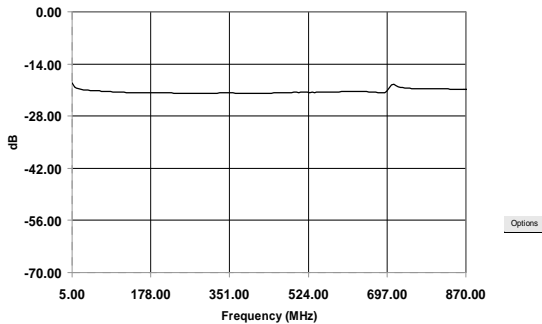
Isolation



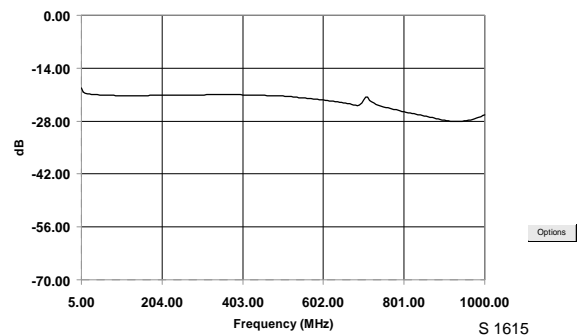
Output Return Loss



Input Return Loss



Coupled Port Return Loss



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