

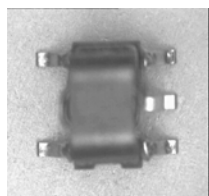
E-Series 75 Ohm Coupler

5 - 1000 MHZ

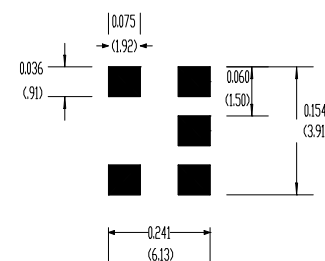
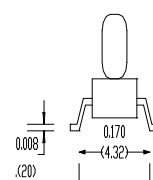
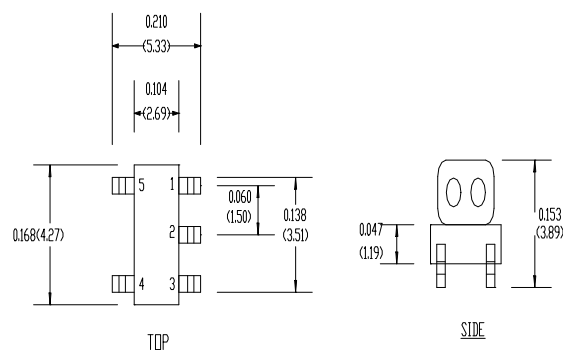


Features

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



SM-138 Package



SUGGEST SOLDER FOOTPRINT

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.

Electrical Specifications @25°C, $Z_0 = 75 \text{ Ohms}$

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

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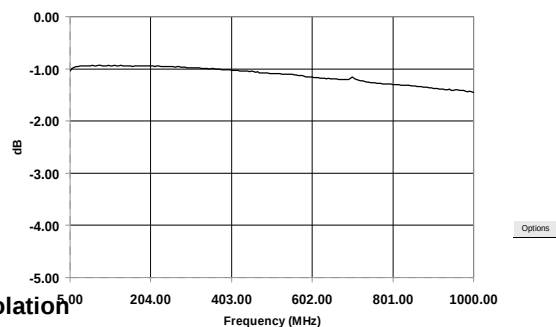
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Absolute Maximum Ratings

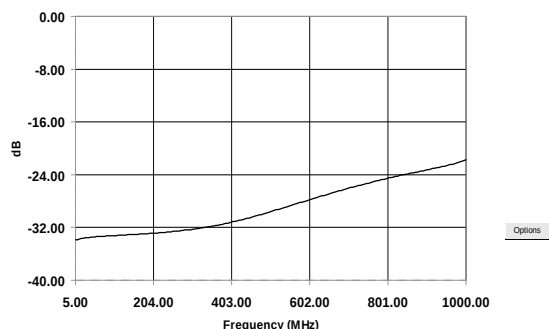
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-40°C to +70°C

Typical Performance Curves @ +25°C

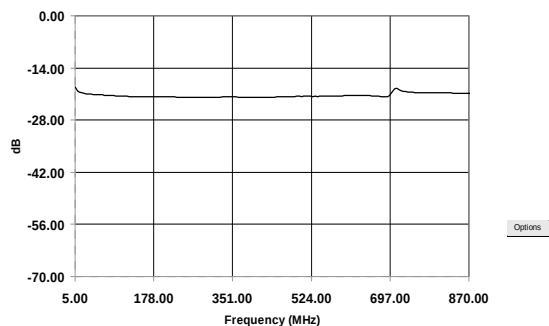
Mainline Loss



Isolation



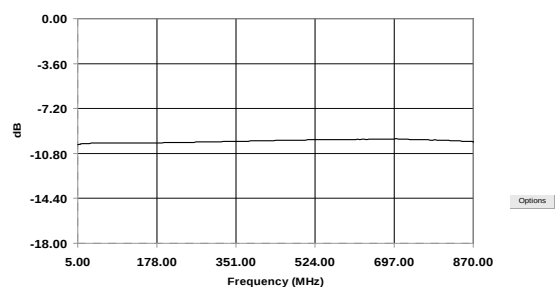
Input Return Loss



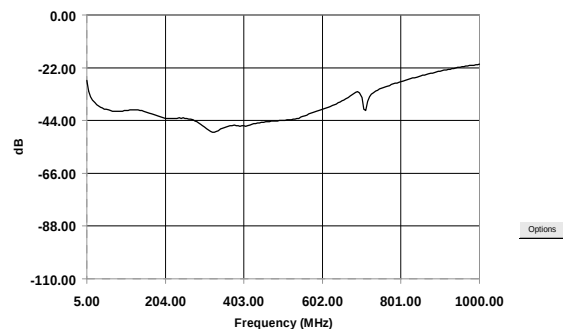
Pin Configuration

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

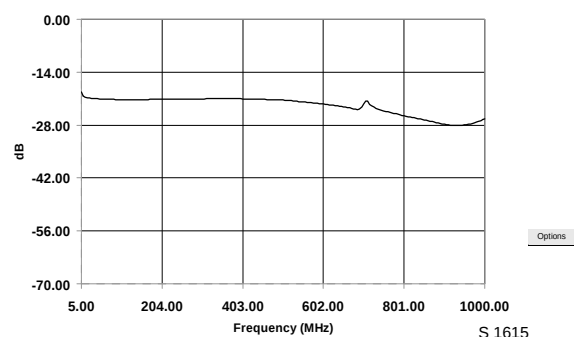
Coupling



Output Return Loss



Coupled Port Return Loss



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