



M/A-COM

E-Series 4-Way 0° Differential Power Divider 5 – 872 MHz

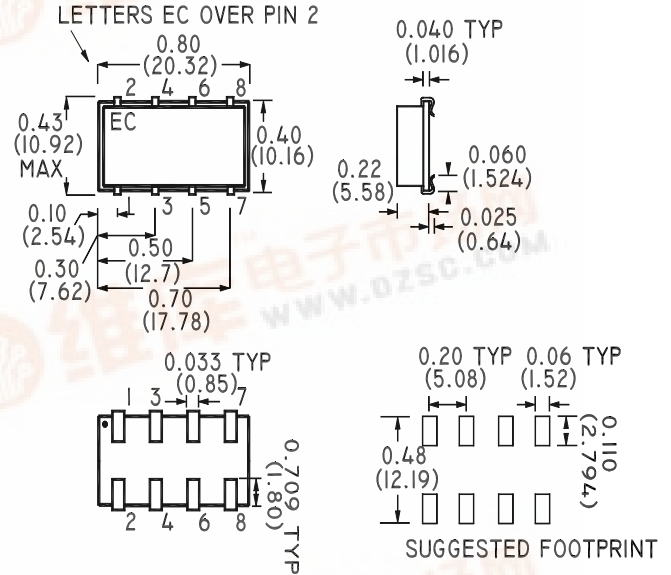


Features

- 4 Way, high and low attenuation O/P's
- 0 Degree Phase Split
- Surface Mount Package
- Available on Tape and Reel



SM-46 Package



Description

M/A-COM's ESJ-4-3-75 is a Low Cost, Broadband, high performance Differential Power Divider for use in high volume CATV applications. It provides two Low Attenuation and two High Attenuation outputs. ESJ-4-3-75 is available in an SM-46 surface mount package and reflows using standard soldering reflow profiles.

Electrical Specifications @ +25°C

Parameter	Units	Minimum	Typical	Maximum
Frequency Range	5 - 872	—	—	—
Insertion Loss Low Attenuation	5 - 800 MHz	5.0	6.0	7.0
	800 - 872 MHz	5.0	6.0	7.2
Insertion Loss High Attenuation	5 - 800 MHz	9.0	9.7	10.4
	800 - 872MHz	9.0	9.7	10.5
Isolation Low Attenuation	5 - 500 MHz	20	—	—
	500 - 872 MHz	16	—	—
Isolation High Attenuation	5 - 872 MHz	17	—	—
		24	—	—
Amplitude Unbalance	5 - 872 MHz	—	—	0.6
Phase Unbalance	5 - 500 MHz	°	—	2°
	500 - 872 MHz	°	—	4°
Input Return Loss	5 - 500 MHz	dB	—	—
	500 - 872 MHz	dB	—	—
Output Return Loss Low Attenuation	5 - 500 MHz	dB	—	—
	500 - 872 MHz	dB	—	—
Output Return Loss High Attenuation	5 - 872 MHz	dB	—	—



Absolute Maximum Ratings

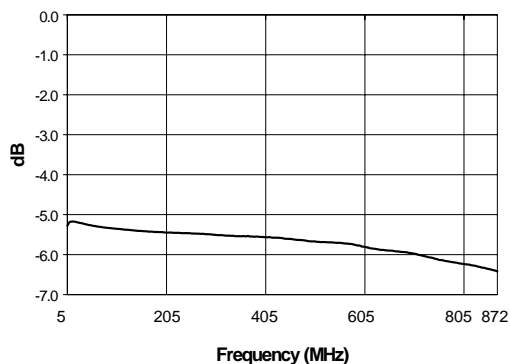
Parameter	Absolute Maximum
Maximum Power Rating	1 Watt
Internal Load Dissipation	0.125 Watt
Pin Temperature (10 Sec)	260°C
Storage Temperature	-55°C to +100°C
Operating Temperature	-20°C to +85°C

Functional Configuration

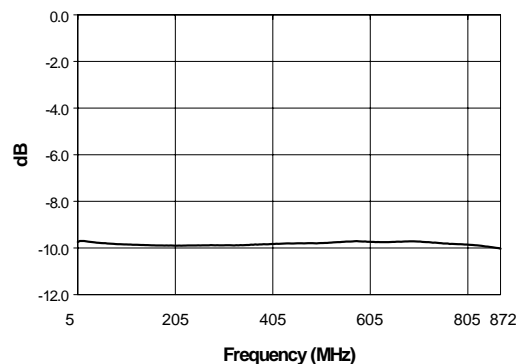
Function	Pin No.
Not Connected	—
External 75 Ohms	—
Ground	1,5,7
Case Ground	—
Input	3
Port 1	2
Port 2	4
Port 3	6
Port 4	8

Typical Performance @ +25°C

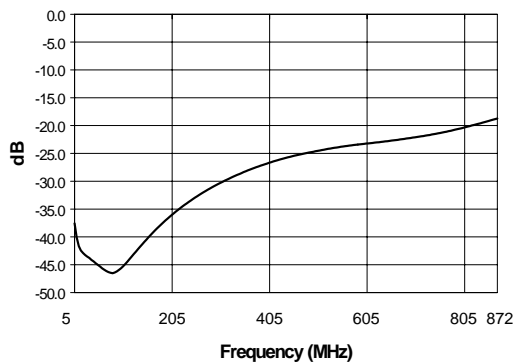
Insertion Loss Low Attenuation



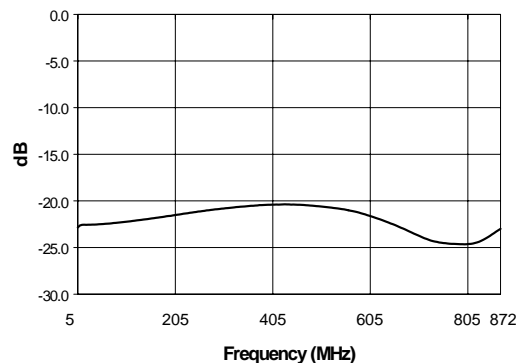
Insertion Loss High Attenuation



Isolation Loss Low Attenuation

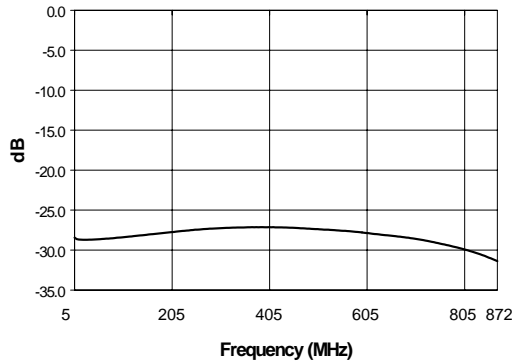


Isolation Loss High Attenuation

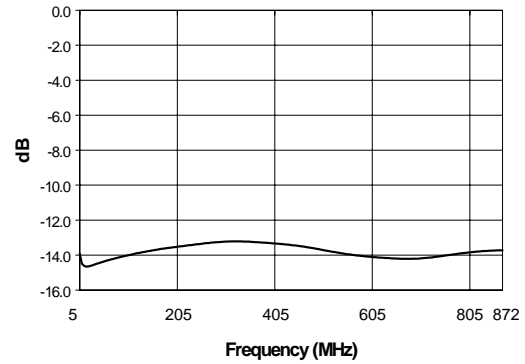


Typical Performance @ +25°C

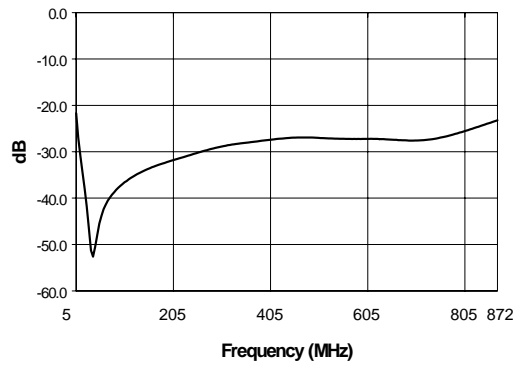
Isolation Loss Port 2 - Port 3



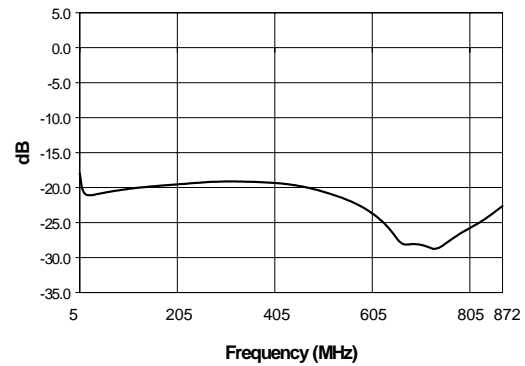
Input Return Loss



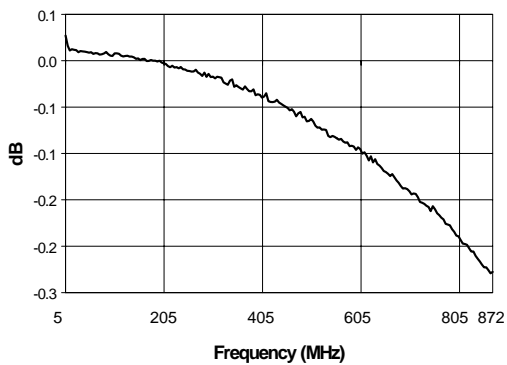
Output Return Loss Low Attenuation



Output Return Loss High Attenuation



Amplitude Unbalance



Phase Unbalance

