

Broadband CATV 3 way 0 degree power divider

MAPDCT0017 Preliminary V1P

Features

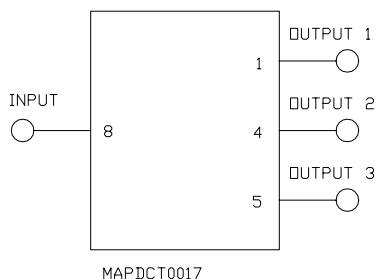
- SMT unit
- 3 way 0 deg power divider
- Available on tape & reel (500 units per reel)
- Excellent temperature stability



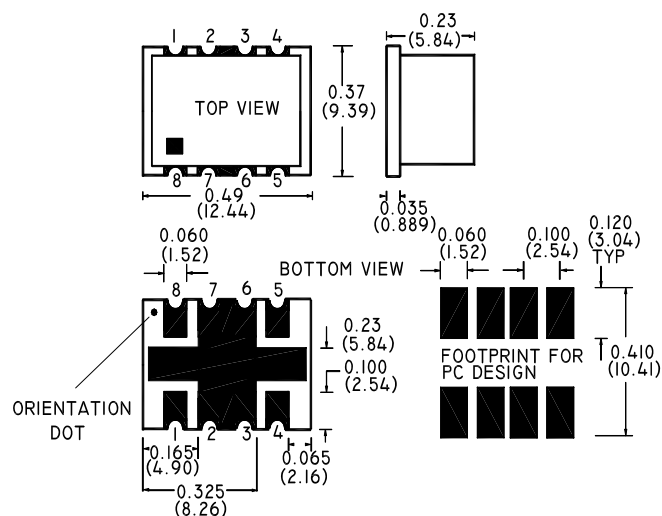
Description

M/A-COM's MAPDCT0017 is a 3 Way 0° Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV & VSAT applications. No external components are required with this product.

Schematic



SM-4 Case Style



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

Pin Configuration

Function	Pin Number
Input	8
Output 1	1
Output 2	4
Output 3	5
Ground	2, 3, 6, 7

Absolute Maximum Ratings¹

	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating/Storage Temperature	-40° C to +85° C

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Electrical Specifications @ 25°C, 75 Ohm

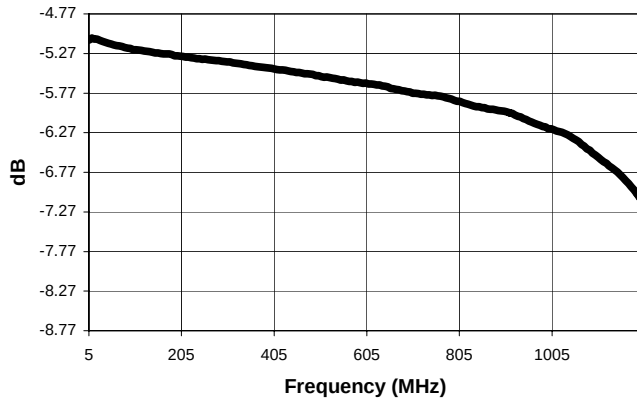
* Monitored during production tune/test

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range: 46-1200 MHz	MHz				
Insertion Loss 1 (pin 8 to 1) * Ref value -4.77dB	46 – 870	dB	-	1.23	1.50
	870 – 1002	dB	-	1.50	1.80
	1002 - 1200	dB	-	2.23	3.20
Insertion Loss 2 (pin 8 to 4) * Ref value -4.77dB	46 – 870	dB	-	1.00	1.30
	870 – 1002	dB	-	1.20	1.50
	1002 - 1200	dB	-	2.00	2.80
Insertion Loss 3 (pin 8 to 5) * Ref value -4.77dB	46 – 870	dB	-	1.50	1.80
	870 – 1002	dB	-	1.80	2.20
	1002 - 1200	dB	-	2.80	3.30
Input Return Loss *	46 – 405	dB	20	25	-
	405 – 1002	dB	17.5	20	-
	1002 – 1200	dB	11	18	-
Output return Loss 1 & 2* (Pin 1, 4)	46 - 1200	dB	20	25	-
Output return Loss 3 * (Pin 5)	46 – 740	dB	20	25	-
	740 – 1002	dB	17	20	-
	1002 - 1200	dB	14	18	-
Isolation between outputs	46 - 1002	dB	20	25	-
	1002 - 1200	dB	18	24	-
Amplitude Unbalance Output 1 to Output 2 (pin 1, 4)	46 - 1002	dB	-	0.3	0.5
Amplitude Unbalance Output 1 to Output 3 (pin 1, 5)	46 - 1002	dB	-	-0.3	-0.5
Phase Unbalance	50 – 1200	°	-4.0	3.0	4.0

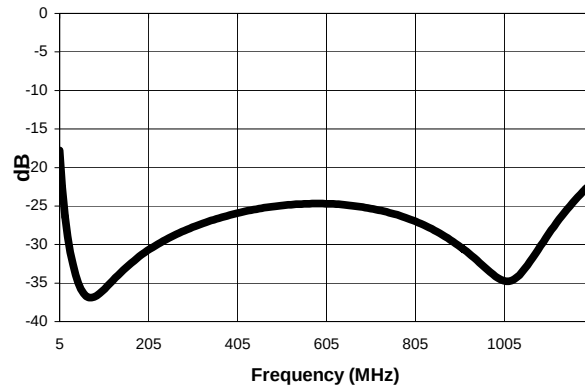
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Typical Performance Curves @ +25°C, 75 Ohm

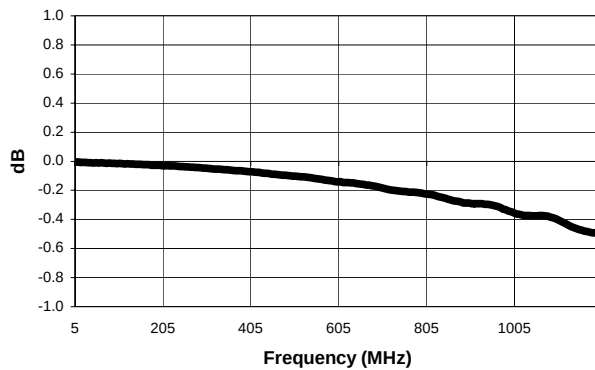
Insertion Loss (ref -4.77dB)



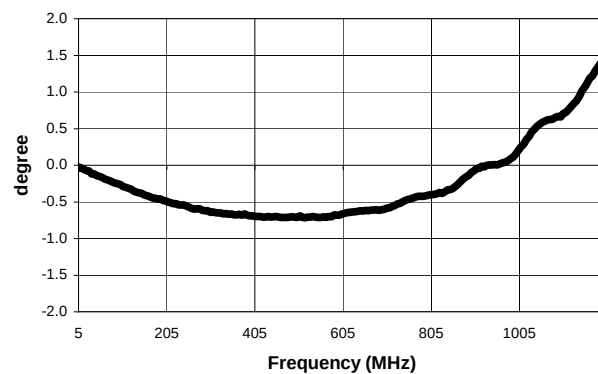
Isolation



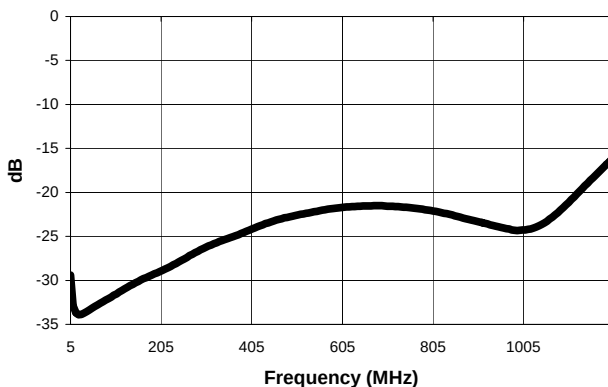
Amplitude Balance



Phase Balance



Input Return Loss



Output Return Loss

