

Specification of 1~2000MHz mixed Mode RF Balun. (Rev. 5)

10-Jan-17

Electrical.

Measured with 2-port Network Analyzer

Ta=25°C

Parameter	Specifications			Conditions	Comments
	min	max	unit		
Bandwidth	1 to 2000		MHz	better than 3dB DM Insertion loss	
Impedance Unbalance	50		Ohm	nominal	single-ended
Impedance Balanced Port	100			nominal	differential
	25~50			nominal	common
Connectors	(2) Female SMA DM, CM (2) Male SMB BAL. PORT		-		D.M. : Diff. Mode C.M. : Comm. Mode
Differential Mode Insertion Loss	-	2	dB	1~1000MHz	Note 1.
	-	3		1000~2000MHz	
Differential Mode Return Loss	12	-	dB	1~15MHz	Measured at the single-anged DM port
	20	-		15~1000MHz	
	15	-		1000~2000MHz	
Common Mode Return Loss	15	-	dB	1~15MHz	Measured at the single-anged CM port
	20	-		15~400MHz	
	15	-		400~2000MHz	
Power Rating	0.1	1	W	1~2000MHz	
Output Signal balance	50	-		1~1000MHz	Note 2.
	40	-		1000~2000MHz	
Longitudinal Balance	60	-	dB	1~100MHz	
	50	-		100~500MHz	
	42	-		500~1000MHz	
	40	-		1000~2000MHz	
Common Mode Rejection	50	-	dB	1~1000MHz	
	40	-		1000~2000MHz	
Dimensions	54 X 25.4 X 50		mm		

Notes PORTS: P1 Female SMA; DM
P2 Male SMA; CM
P3 Male SMA; BAL (+)
P4 Male SMA; BAL (-)

S21(+): P1_P3 with P2 and P4 50 Ω terminated real, imaginary format
S21(-): P1_P4 with P2 and P3 50 Ω terminated real, imaginary format

Note 1. $IL_{dB} = 20 * LOG(|S21(+)| - |S21(-)|) - 3.01$

Note 2. as per ANSI/TIA-568-C.2 with 0.01% tolerance resistors.