

Specification of 1~2000MHz mixed Mode RF Balun. (Rev. 3)

27-Oct-14

Electrical.

Measured with 2-port Network Analyzer

Ta=25°C

Parameter	Specifications				Conditions	Comments
	min	typ	max	unit		
Bandwidth	1 to 2000			MHz	better than 3dB DM Insertion loss	
Impedance Differential Port	50			ohm	nominal	single-ended
Impedance Common Port	50				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	1~3MHz	Note 1.
	-	-	2		3~15MHz	
	-	-	2		15~1000MHz	
	-	-	3		1000~2000MHz	
Differential Mode Return Loss	8	10	-	dB	1MHz	Measured at the single-ended DM port
	15	16	-		3MHz	
	15	-	-		3~15MHz	
	20	-	-		15~1000MHz	
	15	-	-		1000~2000MHz	
Common Mode Return Loss	15	-	-	dB	1~3MHz	Measured at the single-ended CM port
	20	-	-		3~200MHz	
	16	-	-		200~500MHz	
	12	-	-		500~1000MHz	
	8	-	-		1000~2000MHz	
Power Rating	-	-	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	
	34	-	-		1000~2000MHz	
Common Mode Rejection	50	-	-	dB	1~500MHz	
	50	-	-		500~1000MHz	
	40	-	-		1000~2000MHz	
Dimensions	54 X 25.4 X 50mm			mm		

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

S21(+): P1_P3 with P2 and P4 50Ω terminated.

S21(-): P1_P4 with P2 and P3 50Ω terminated.

real, imaginary format

real, imaginary format

Note 1. IL=20LOG |S21(+)-S21(-)|+ 3.01 [dB]

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

Mechanical Drawing

