

Cavity Duplexer

A2TDL082QN

Revision record

Date	Version	Author	Revision description	Comment
2024/10/17	V1.4	Sam	Created	/

Electrical specification

Parameter	Specification	
Service Duplexer	UL-RX	DL-TX
Frequency range	832-862MHz	791-821MHz
Insertion loss	≤2.6dB	≤2.6dB
Ripple	≤1.4dB	≤1.4dB
Return loss	≥15dB	≥15dB
Attenuation@Stopband1	≥81dB@791-821MHz	≥85dB@832-862MHz
Attenuation@Stopband2	≥50dB@447-702MHz	≥50dB@406-661MHz
Attenuation@Stopband3	≥50dB@992-1247MHz	≥50dB@951-1206MHz
Attenuation@Stopband4	≥30dB@60-406MHz	≥25dB@1427-2700MHz
Attenuation@Stopband5	/	≥35dB@433-434MHz
Attenuation@Stopband6	≥40dB@925-960MHz	≥35dB@863-870MHz
PIM3	/	≥142dB@2X37dBm
Isolation UL-DL	≥40dB@832-821MHz	
Power	50W	
Operating temperature range	-25°C to +70°C	
Impedance	50Ohm	

Parameter	Specification	
Donor Duplexer	UL-TX	DL-RX
Frequency range	832-862MHz	791-821MHz
Insertion loss	≤2.6dB	≤2.6dB
Ripple	≤1.4dB	≤1.4dB
Return loss	≥15dB	≥15dB
Attenuation@Stopband1	≥81dB@791-821MHz	≥66dB@832-862MHz
Attenuation@Stopband2	≥50dB@447-702MHz	≥50dB@406-661MHz
Attenuation@Stopband3	≥50dB@992-1247MHz	≥50dB@951-1206MHz
Attenuation@Stopband4	≥25dB@1247-2700MHz	≥30dB@60-406MHz
Attenuation@Stopband5	≥57dB@873-880MHz	/
Attenuation@Stopband6	≥53dB@918-925MHz	/
PIM3	≥134dB@2X22dBm	/
Isolation UL-DL	≥40dB@832-821MHz	
Power	1W	
Operating temperature range	-25°C to +70°C	
Impedance	50Ohm	

Mechanical specification

Parameter	Specification	
Dimension	L x W x H: 381mm x 139mm x 30mm(±0.2mm)	
Connectors	Service/Donor: QN-Female	
	UL-RX/DL-RX: SMP-Male	DL-TX/UL-TX: MCX-Female
Finish	Silver Plated	
Notes	Material shall be RoHS 6/6	

Outline

