

Cavity Duplexer

A2TDU212QN

Revision record

Date	Version	Author	Revision description	Comment
2024/10/17	V1.5	Sam	Created	/

Electrical specification

Parameter	Specification	
Service Duplexer	UL-RX	DL-TX
Frequency range	1920-1980MHz	2110-2170MHz
Insertion loss	≤1.1dB	≤1.1dB
Ripple	≤0.3dB	≤0.3dB
Return loss	≥15dB	≥15dB
Attenuation@Stopband1	≥81dB@2110-2170MHz	≥83dB@1920-1980MHz
Attenuation@Stopband2	≥50dB@1550-1805MHz	≥50dB@1740-1995MHz
Attenuation@Stopband3	≥50dB@2095-2350MHz	≥50dB@2285-2540MHz
Attenuation@Stopband4	≥30dB@60-1700MHz	≥25dB@2350-4000MHz
Attenuation@Stopband5	≥40dB@1805-1880MHz	≥35dB@433-434MHz
Attenuation@Stopband6	/	≥35dB@863-870MHz
PIM7	/	≥141dB@2X37dBm
Isolation UL-DL	≥40dB@1920-2170MHz	
Power	50W	
Operating temperature range	-25°C to +70°C	
Impedance	50Ohm	

Parameter	Specification	
Donor Duplexer	UL-TX	DL-RX
Frequency range	1920-1980MHz	2110-2170MHz
Insertion loss	≤1.1dB	≤1.1dB
Ripple	≤0.3dB	≤0.3dB
Return loss	≥15dB	≥15dB
Attenuation@Stopband1	≥73dB@2110-2170MHz	≥66dB@1920-1980MHz
Attenuation@Stopband2	≥50dB@1550-1805MHz	≥50dB@1740-1995MHz
Attenuation@Stopband3	≥50dB@2095-2350MHz	≥50dB@2285-2540MHz
Attenuation@Stopband4	≥25dB@2350-4000MHz	≥30dB@60-1700MHz
Attenuation@Stopband5	/	/
Attenuation@Stopband6	/	/
PIM7	≥126dB@2X22dBm	/
Isolation UL-DL	≥40dB@1920-2170MHz	
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

