

LC Duplexer

ALCD600M2700M36SMD

Revision record

Date	Version	Author	Revision description	Comment
2024/12/06	V1.2	Vivian	Created	/
2024/12/12	V1.3	Vivian	Updated the Rejection/Return loss/ Dimension	/
2024/12/17	V1.4	Vivian	Updated the Simulation curve	/

Electrical specification

Parameter	Specification	
Frequency range	PB1:600-960MHz	PB2:1800-2700MHz
Insertion loss	$\leq 1.0\text{dB}$	$\leq 1.5\text{dB}$
Passband ripple	$\leq 0.5\text{dB}$	$\leq 1\text{dB}$
Return loss	$\geq 15\text{dB}$	$\geq 15\text{dB}$
Rejection	$\geq 40\text{dB}@1230-2700\text{MHz}$	$\geq 30\text{dB}@600-960\text{MHz}$ $\geq 46\text{dB}@3300-4200\text{MHz}$
Power	30dBm	

Mechanical specification

Parameter	Specification
Dimension	L x W x H: 33mm x 43mm x 8mm
Connectors	SMD
Notes	Material shall be RoHS 6/6

[illegible]

Lowpass [Cauer-Chebyshev: Normal], Order 7

Frequency (MHz)	Gain (dB)	Type
958.1	-0.555	Passband Peak
1020.8	-0.244	Passband Peak
1053.5	-22.35	Passband Peak
1233.8	-40.288	Stopband Peak
1307.7	-128	Stopband Peak
1620.0	-100	Stopband Peak
2260.0	-144	Stopband Peak

Bandpass [Chebyshev: Order 6]

Frequency (MHz)	Gain (dB)	Type
881.0	-0.045	Passband Peak
1011.0	-22.438	Stopband Peak
1881.0	-18.268	Passband Peak
2705.5	-28.234	Stopband Peak
3307.7	-54.923	Stopband Peak
3307.7	-9.183	Passband Peak