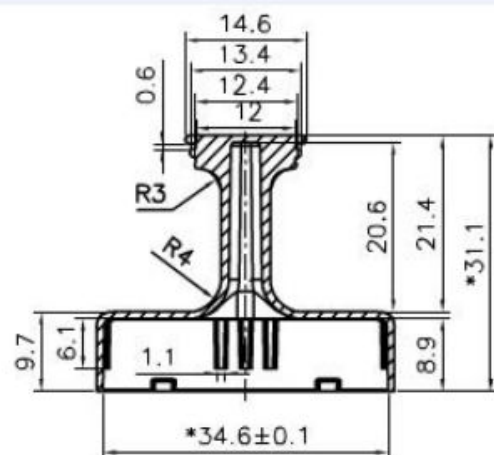
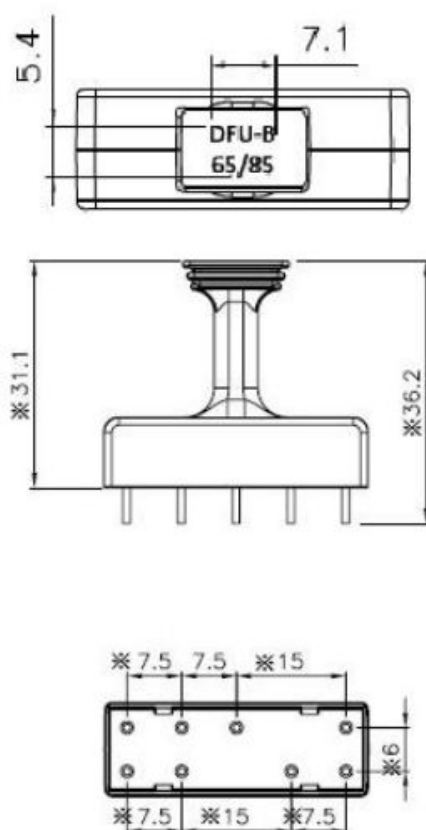


Outline drawing

Feature:

- Surface mount
 - 10pcs per/box
 - CATV Applications
 - RoHS* compliant
- .DOCSIS 3.0



Tolerance ± 0.1 Unit mm

PIN CONFIGURATION

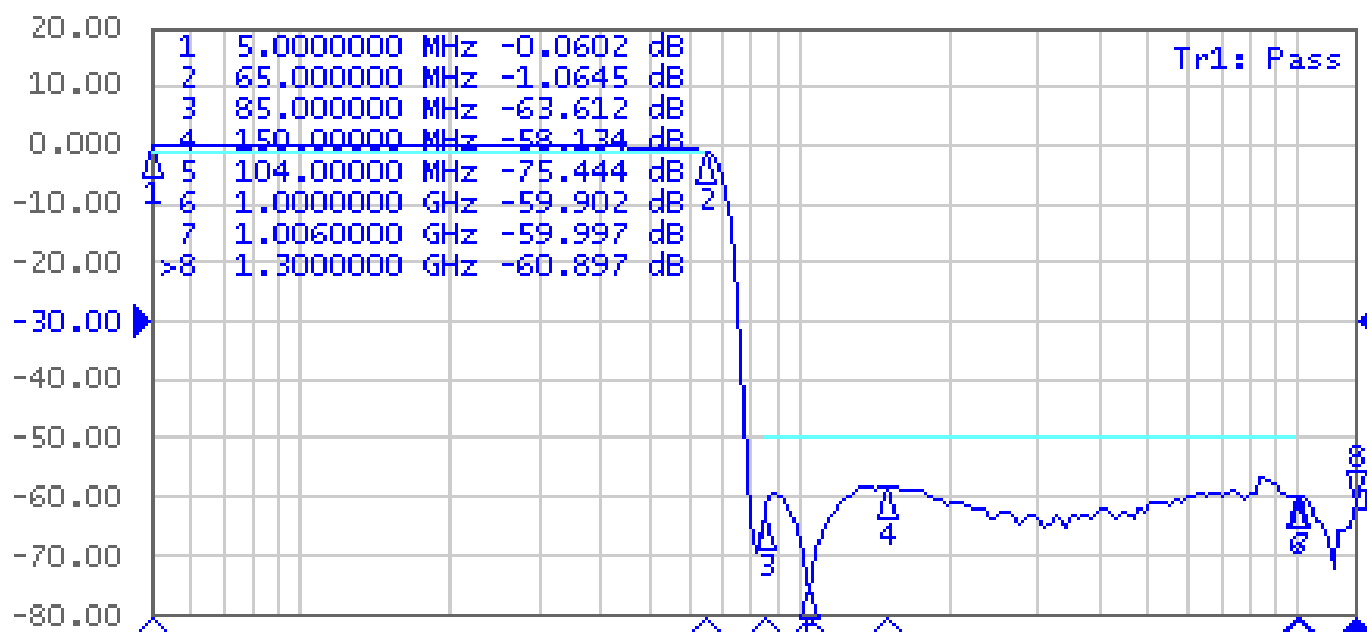
Diplexer	
Pin Number	Function
As per customer request	RF Common Port Connection
	RF Low Port Connection relative to pin
	RF High Port Connection relative to pin
	Ground

Item	Units	Spec	Note
Low Pass Frequency	MHz	5-65	
High Pass Frequency	MHz	85-1006	
Insertion loss	dB	$\leq 1.2\text{dB}$ (at 5~65MHz)	1.2.3
	dB	$\leq 1.2\text{dB}$ (at 85~1006MHz)	
Return Loss	dB	$\leq -25\text{dB}$ (at 5~50MHz)	
	dB	$\leq -23\text{dB}$ (at 50~65MHz)	
	dB	$\leq -21\text{dB}$ (at 85~150MHz)	
	dB	$\leq -18\text{dB}$ (at 150~1000MHz)	
Isolation	dB	$\geq 50\text{dB}$ (at 5~65MHz)	
	dB	$\geq 50\text{dB}$ (at 85~1000MHz)	
Cross Isolation	dB	$\geq 35\text{dB}$ (at 85~104MHz)	

1. 65Mhz 至 85MHz 之间的波峰形状饱满圆滑，不可呈尖锐状。
2. 65Mhz 点需在波形上升沿且位于-23dB 以下。
3. 85Mhz 点需在波形上升沿且位于-23dB 以下。
4. 85Mhz-1.3GHZ 不能有尖峰

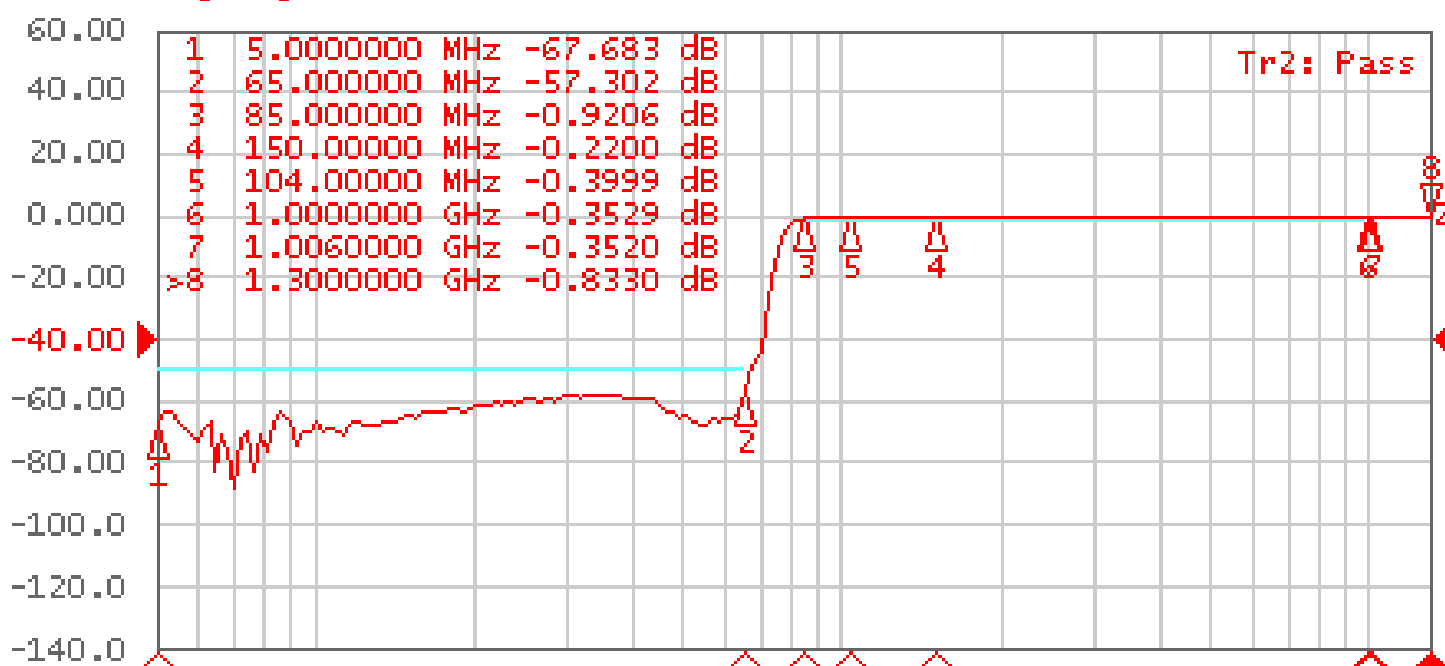
Common to low pass

Tr1 S21 Log Mag 10.00dB/ Ref -30.00dB [F3]



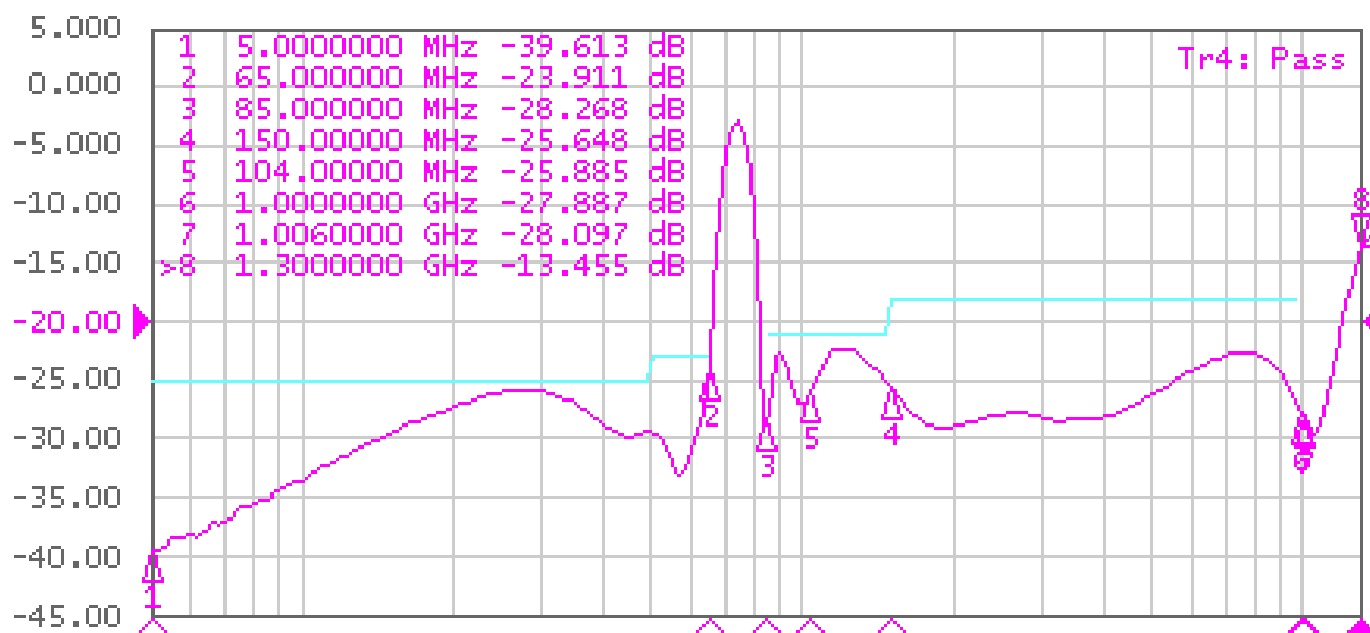
Common to high pass

Tr2 S31 Log Mag 20.00dB/ Ref -40.00dB [F3]



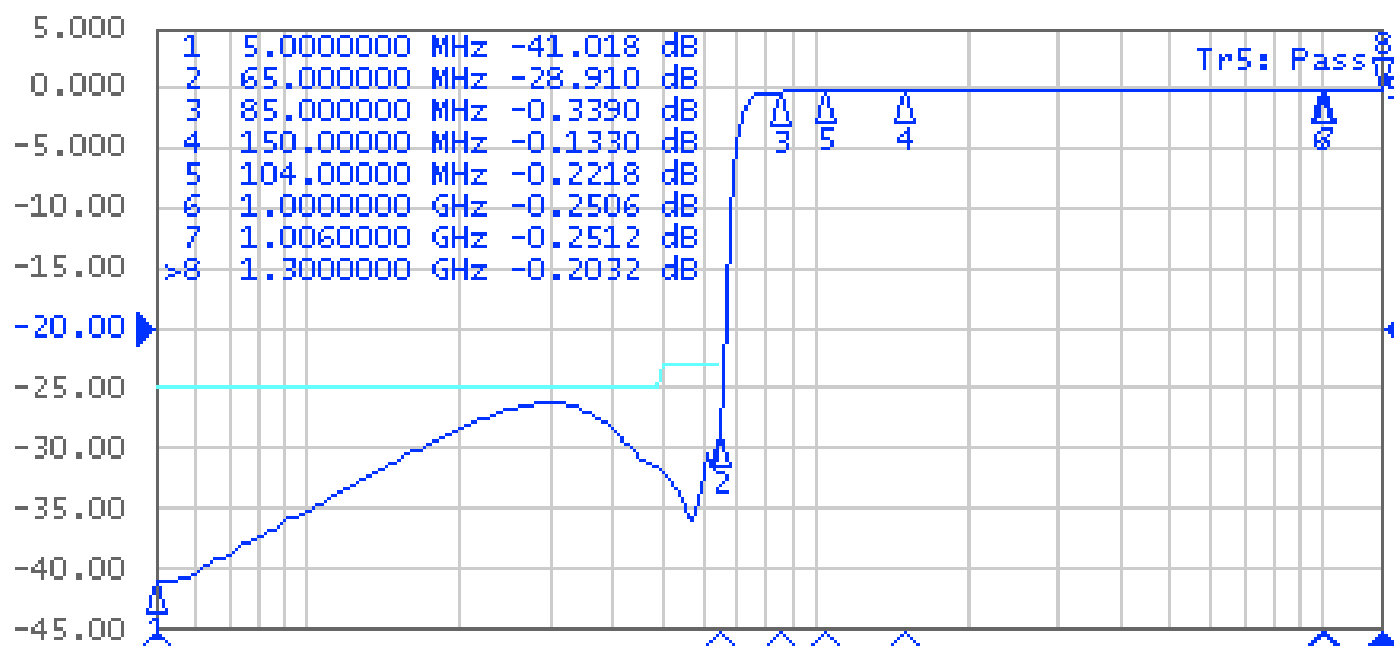
Input return loss

Tr4 S11 Log Mag 5.000dB/ Ref -20.00dB [F3]



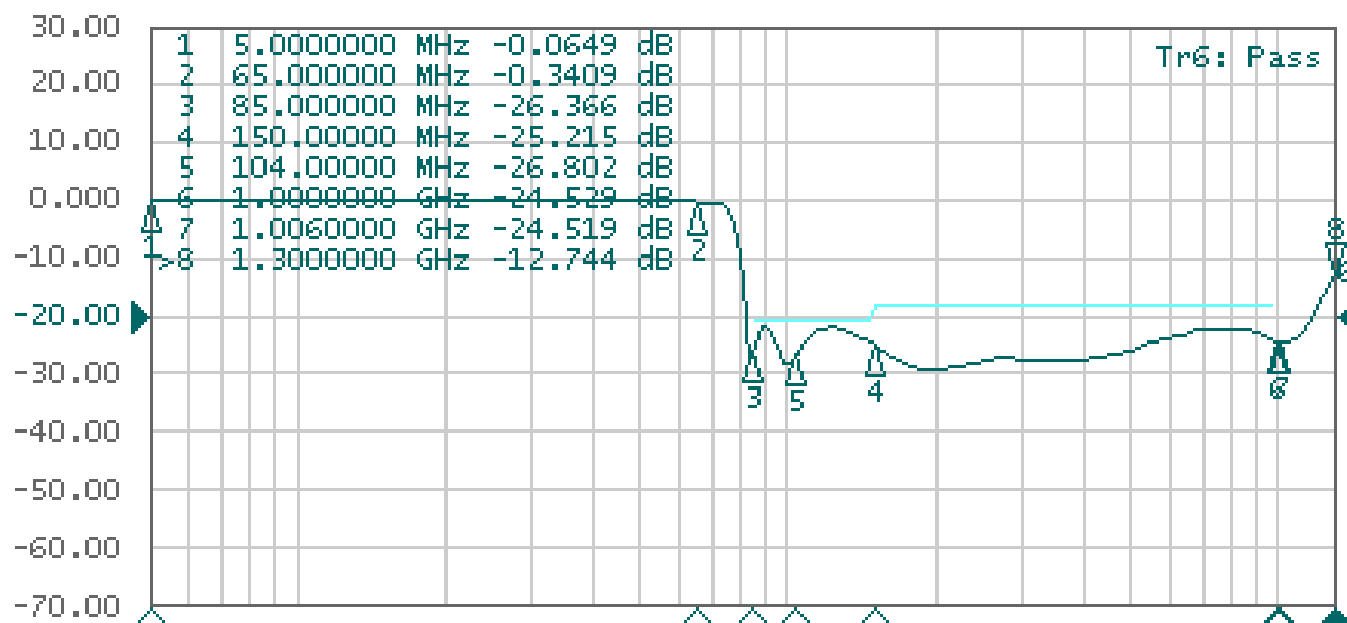
Low Pass Filter Output Return Loss

Tr5 S22 Log Mag 5.000dB/ Ref -20.00dB [F3]



High Pass Filter Output Return Loss

▶ Tr6 S33 Log Mag 10.00dB/ Ref -20.00dB [F3]



Isolation

Tr3 S32 Log Mag 10.00dB/ Ref -70.00dB [F3]

