

<i>Project Name</i> Band Diplexer	<i>Unit Name</i>	<i>Module Name</i> ADPX 1176/1575-SCM3	<i>Revision</i> 3.0	<i>페이지</i> 1 of 6
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Electrical Specification of Band DIPLEXER

ADPX 1176/1575-SCM3

(Version 3.0)



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1. Electrical Specifications

Parameter	Specification		Comment
Band Name	L5 Band (Low)	L1 Band (High)	
Center Frequency f_0	1,176.45 MHz	1,575.42 MHz	
Pass Band Frequency	1,166.45 ~ 1,186.45 MHz	1,565.42 ~ 1,585.42 MHz	
Insertion Loss @ Pass Band	4.3 dB Max	4.3 dB Max	
Ripple @ Pass Band	0.7 dB Max.	0.7 dB Max.	
Return Loss @ Pass Band	15 dB Min.	15 dB Min.	
Group Delay Variation	15 nsec Max.	9 nsec Max.	
Absolute Attenuation	50 dBc Min. @ 1000 ~ 1147 MHz 50 dBc Min. @ 1220 ~ 1300 MHz	60 dBc Min. @ 1315~ 1520 MHz 60 dBc Min. @ 1635 ~ 2000 MHz	
In/Out Impedance	50 Ω		
Max Input power	20 dBm Max.		
Operating Temp.	-55 $^{\circ}\text{C}$ ~ + 85 $^{\circ}\text{C}$		

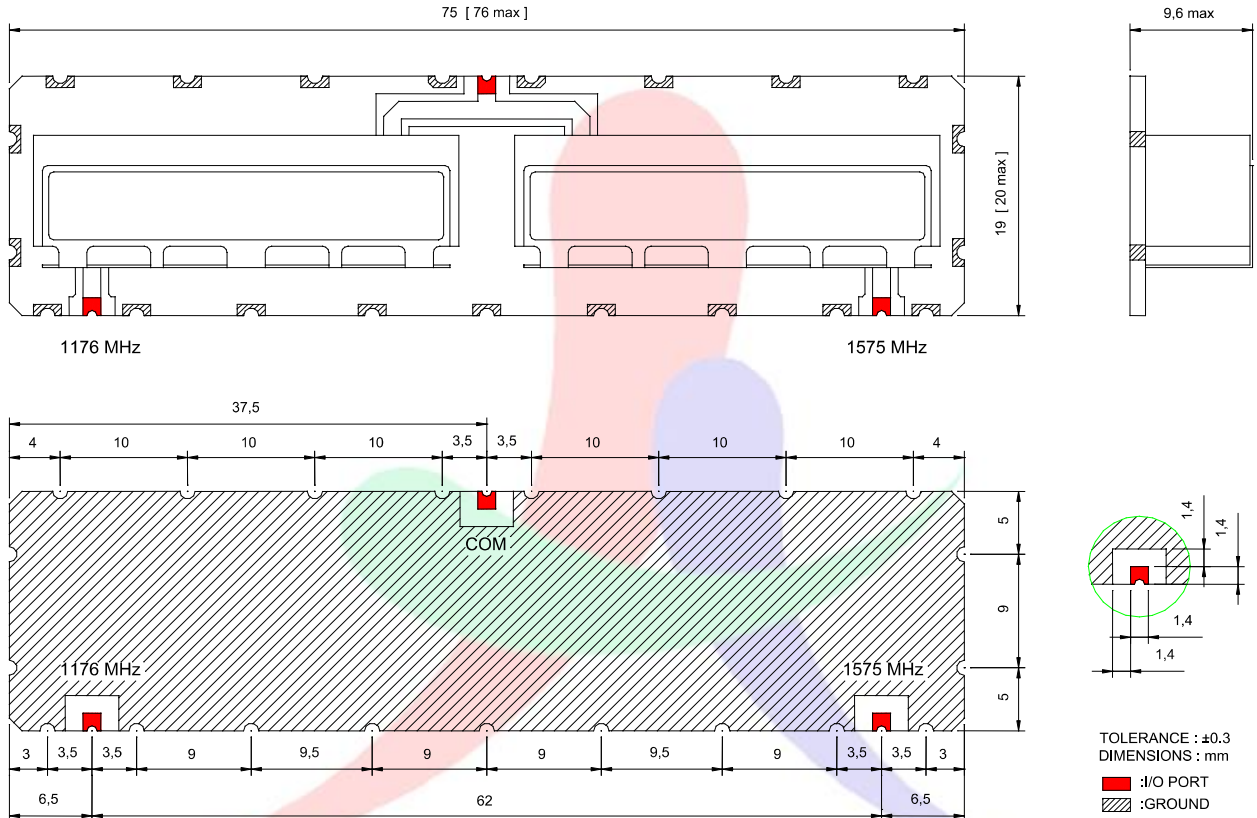
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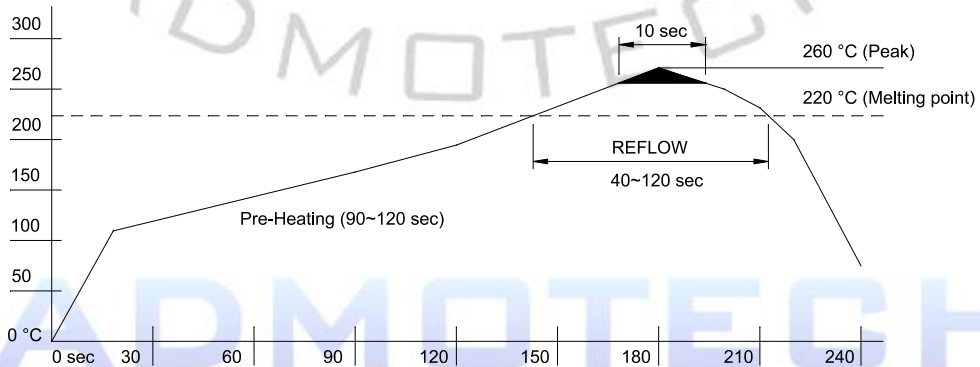
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2. Mechanical Specifications

● TOP VIEW



3. Reflow Soldering Condition

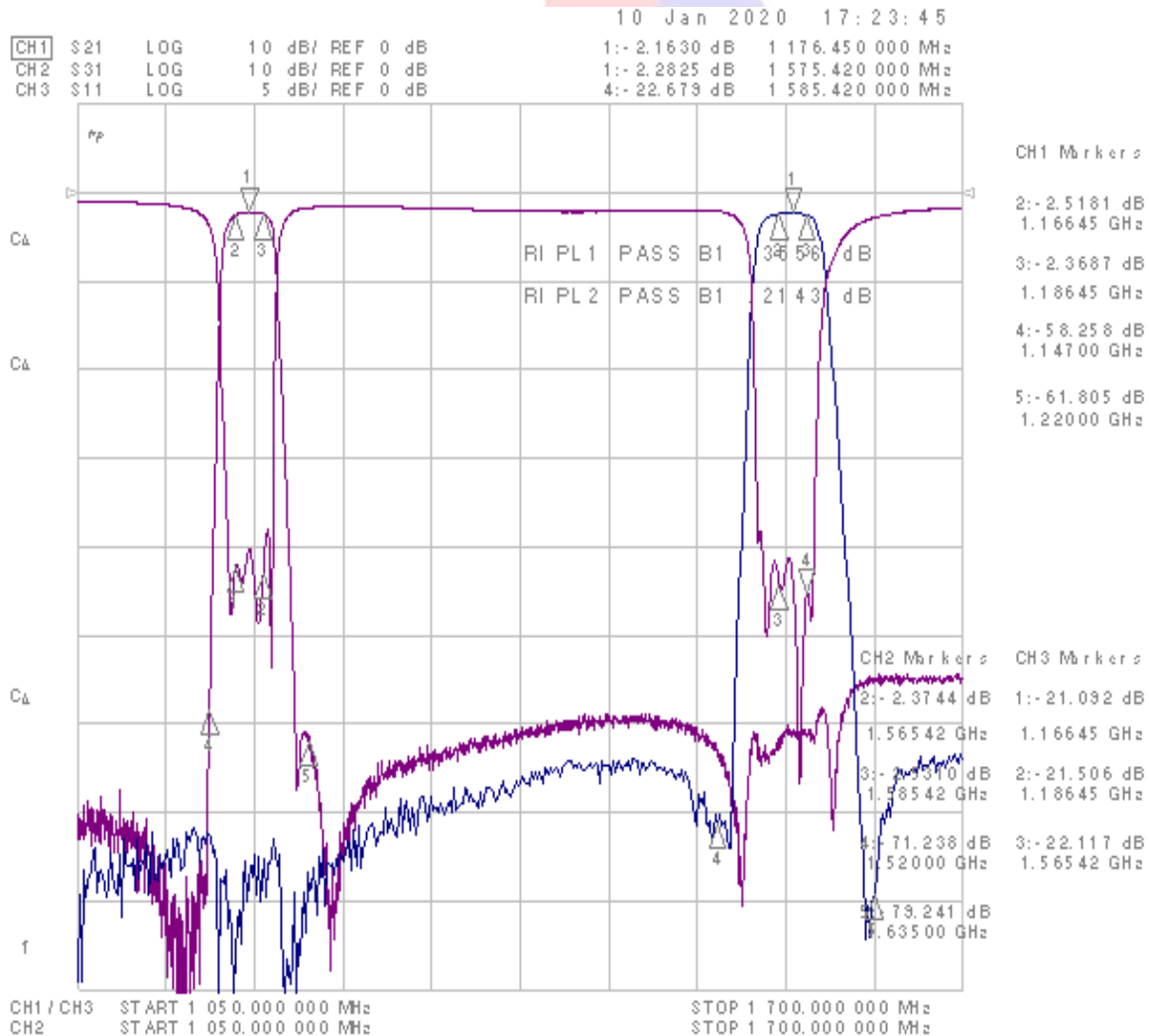


- Pre-Heating 175 ± 25 °C (90~120 sec)
- Heating 220 ± 5 °C (40~120 sec)
- Peak Temperature 260 ± 5 °C (10 sec. max.)

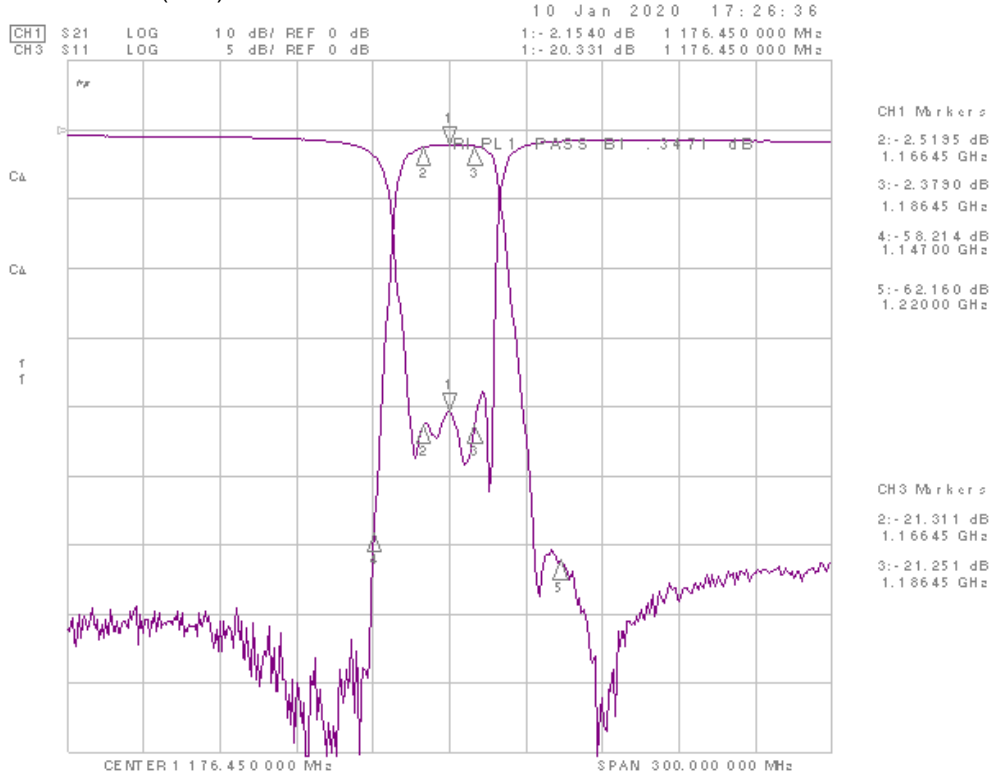
4. Photo of tested Sample ADPX 1176/1175-SCM3



5. Tested Plot



5.1 Band L5 (Low)



- Max Insertion Loss of L5 Band(Low) : 2.51 dB (Marker 2)
- Passband Ripple of L5 Band(Low) : 2.51 dB – 2.15 dB = 0.35 dB
- Min. Attenuation @ 1000 ~ 1147 MHz : 58.21 dB
- Min. Attenuation @ 1220 ~ 1300 MHz : 62.16 dB

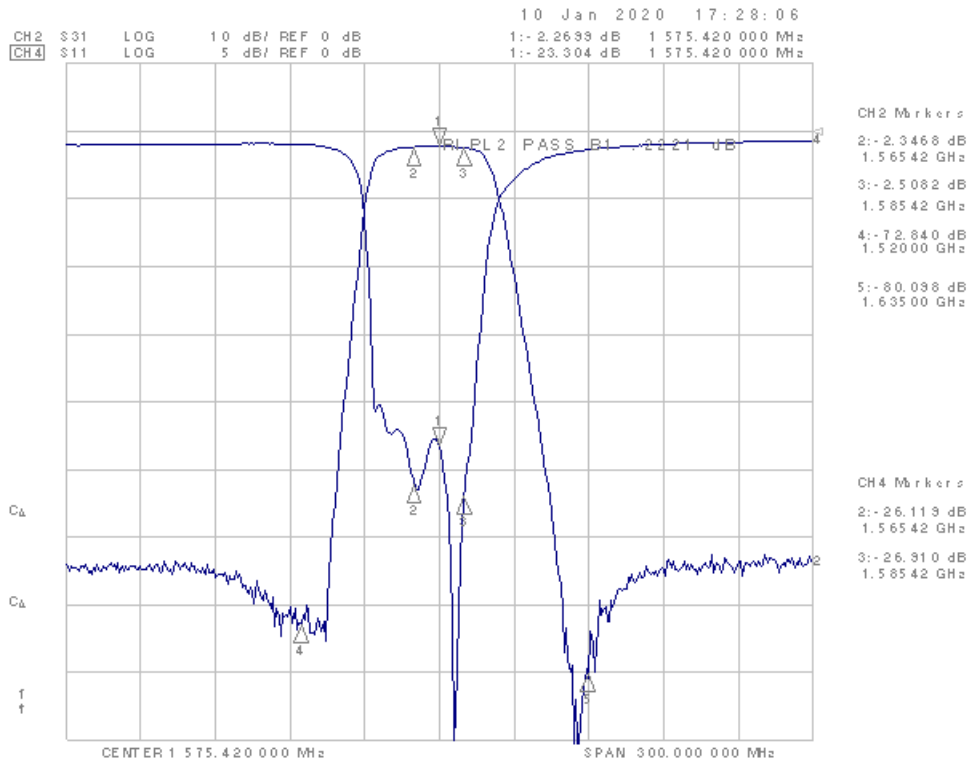


- Group Delay Variation : 47.15 nS - 38.73 nS = 8.43 nS

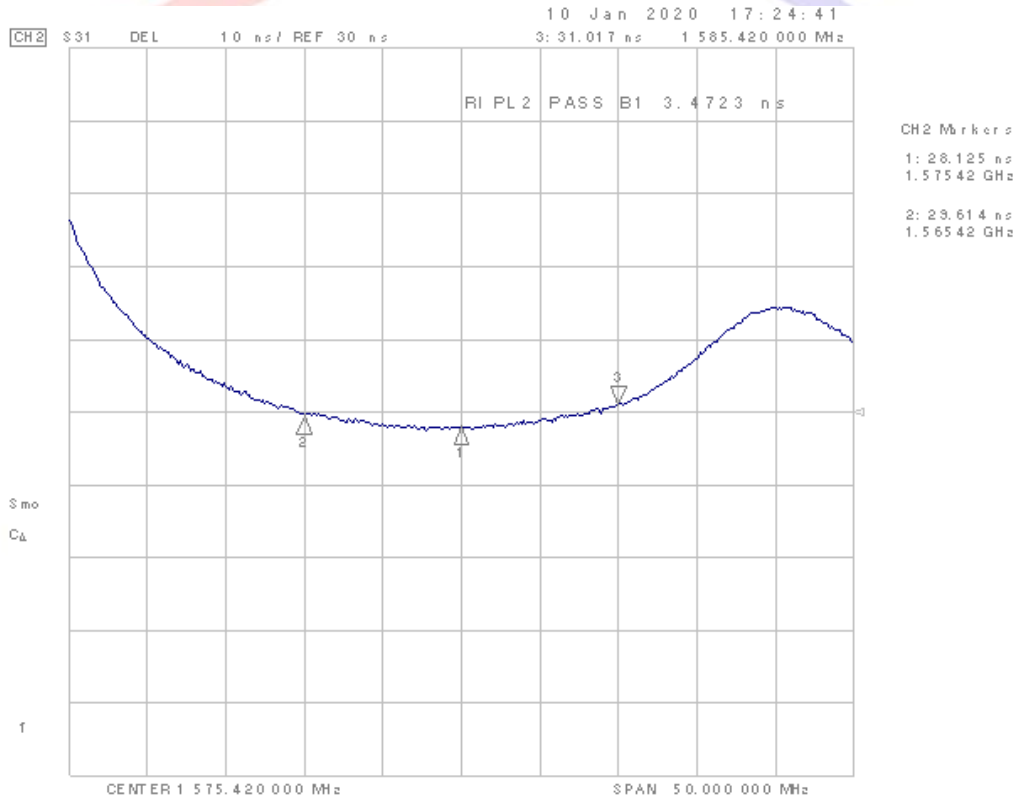


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5.2 Band L1 (High)



- Max Insertion Loss of L1 Band(High) : 2.51 dB (Marker 3)
- Passband Ripple of L5 Band(Low) : 2.51 dB – 2.26 dB = 0.25 dB
- Min. Attenuation @ 1315 ~ 1520 MHz : 64 dB
- Min. Attenuation @ 1635 ~ 2000 MHz : 63 dB



- Group Delay Variation : 31.07 nS - 28.15 nS = 2.92 n