

► **Filter Splitter for DMB**

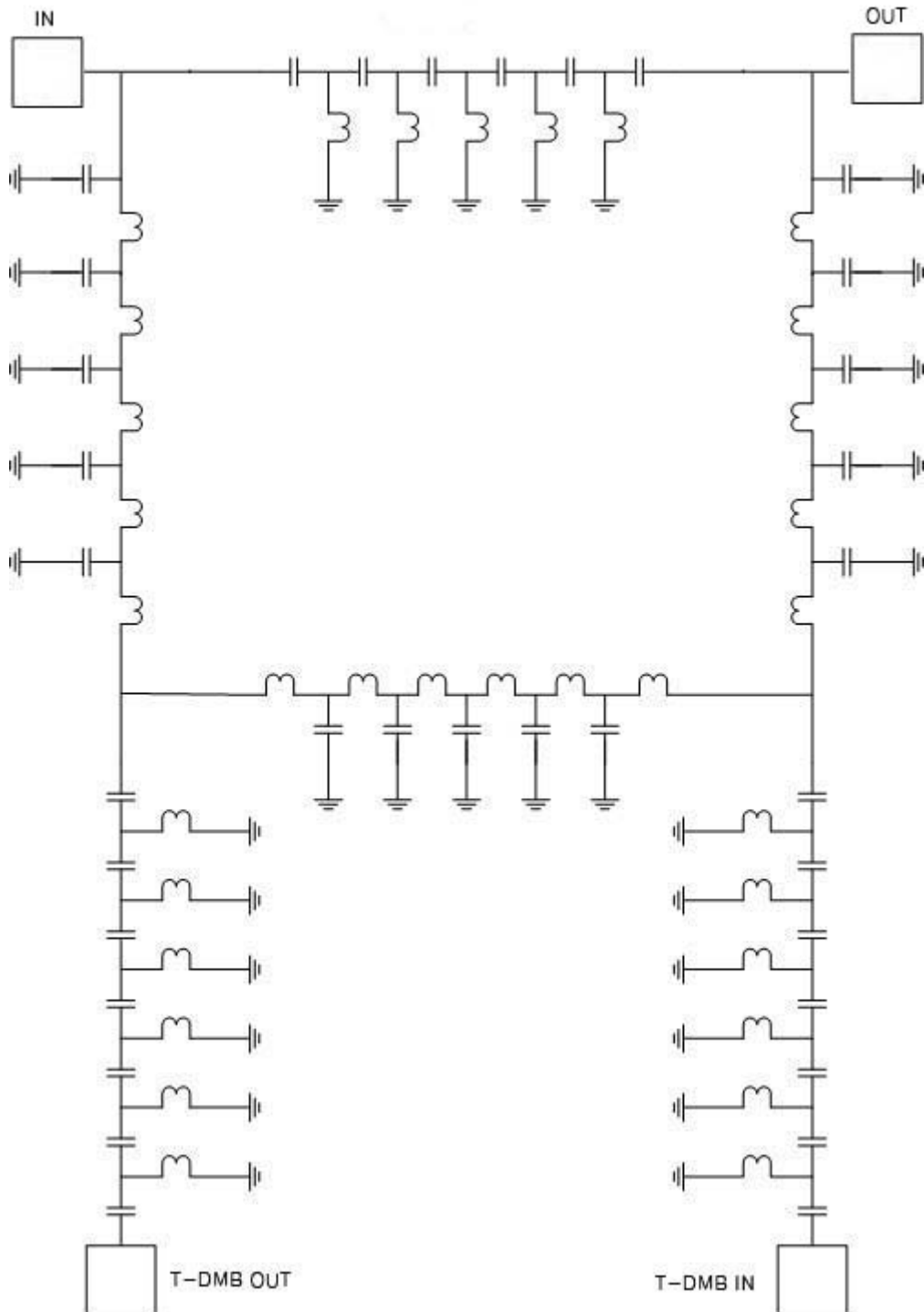
1. Specification

NO	Parameter	Specification			Remark
		In→T-DMB Out	T-DMB In→Out	In → Out	
1	Frequency Range	174 ~ 220MHz	174 ~ 220MHz	88 ~ 108MHz 450 ~ 900MHz	
2	Insertion Loss (max)	1.0dB	1.0dB	1.0dB	
3	VSWR (max)	1.5 : 1	1.5 : 1	1.5 : 1	
4	Pass Band Ripple (max)	0.5dB	0.5dB	0.5dB	
5	Isolation (min)	50dBc @ T-DBM <-> FM, Fire facility, TRS			
6	Input Power	100W			
7	Impedance	50Ω			
8	Temperature / Humidity	-20℃ ~ + 65℃ / 0 ~ 90%			
9	Connector Type	"N" Type Female			

- Part List

NO.	Parts	Specification	Material	Remark
1	Housing	170 X 210.5 X 24	AL6061	Ag-plating
2	Cover	170 X 210.5 X 2T	AL6061	Ag-plating
3	PCB	Er=3.2 62Mil		
4	Connector	Small N-TYPE(F) 4H-5X3	Brass	Ni-plating(PIN_Au-plating)
5	BOLT	M3X8 외	SUS	
6	BRACKET	25X25X159X3T	AL5052	
7	PAD	159X15.5X1.5T	Rubber	
8	Painting	427C		White

2. Block Diagram



4. Test Report

4.1. Data Sheet

- In → T-DMB out Path

Parameter	Specification	DATA
Insertion Loss	1.0dB max @ 174 ~ 220MHz	0.44 dB
VSWR	1.5:1 Max. @ 174 ~ 220MHz	21.5 dB
Pass Band Ripple	0.5dB max @ 174 ~ 220MHz	0.04 dB
Isolation	50dBc min @ FM, Fire facility, TRS	60.0 dBc

- T-DMB In → Out Path

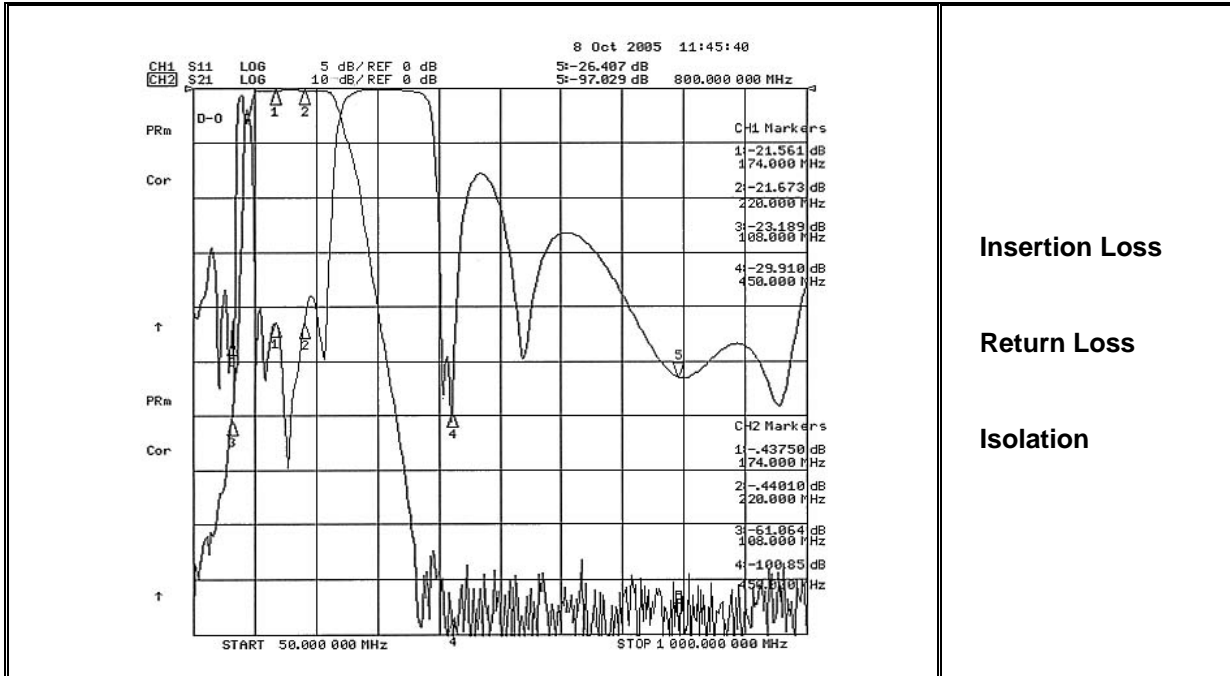
Parameter	Specification	DATA
Insertion Loss	1.0dB max @ 174 ~ 220MHz	0.45 dB
VSWR	1.5:1 Max. @ 174 ~ 220MHz	27.1 dB
Pass Band Ripple	0.5dB max @ 174 ~ 220MHz	0.05 dB
Isolation	50dBc min @ FM, Fire facility, TRS	58 dBc

- In → Out Path

Parameter	Specification	DATA
Insertion Loss	1.0dB max @ 88~108MHz, 450MHz, 800~900MHz	0.65 dB
VSWR	1.5:1 Max. @ 88~108MHz, 450MHz, 800~900MHz	20.7 dB
Pass Band Ripple (FM)	0.5dB max @ 88~108MHz, 450MHz, 800~900MHz	0.27 dB
Pass Band Ripple (TRS)	0.5dB max @ 88~108MHz, 450MHz, 800~900MHz	0.04 dB
Isolation	50dBc min @ 174 ~ 220MHz	85.2 dB

4.2. Data (Network Analyzer)

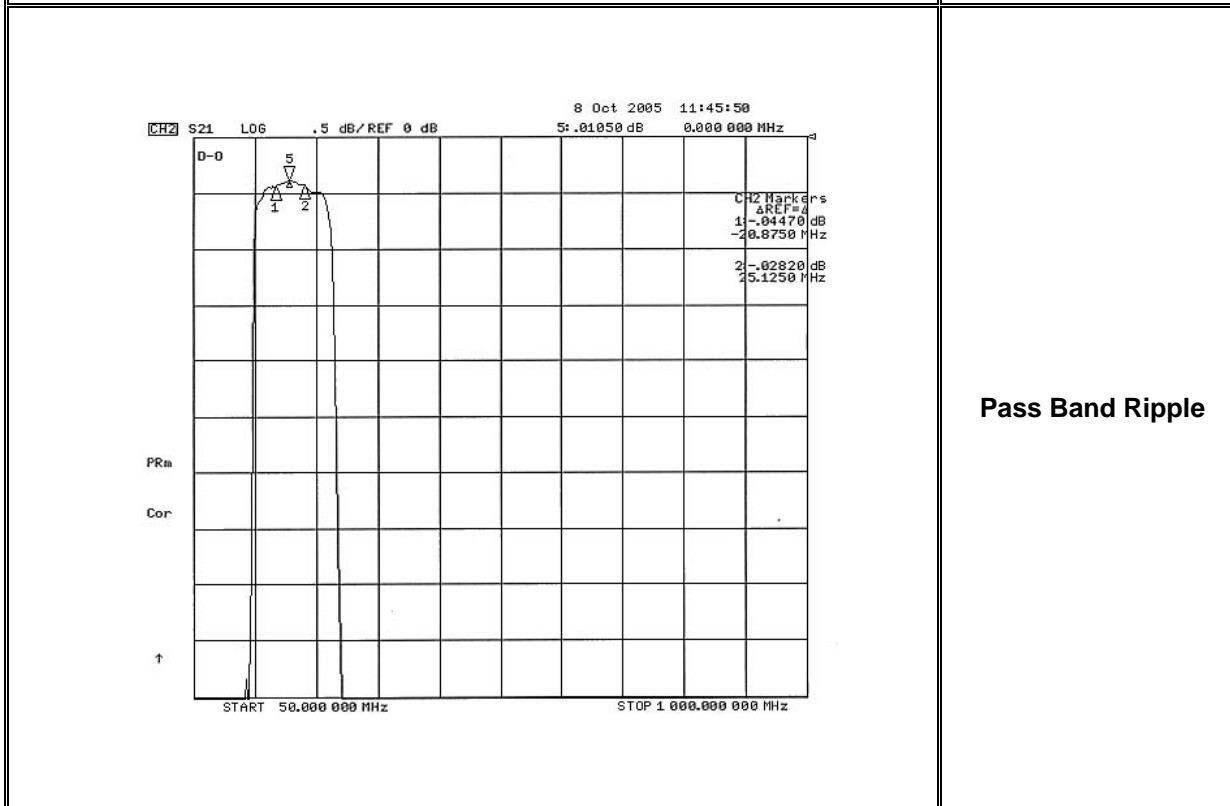
- In → T-DMB out Path



Insertion Loss

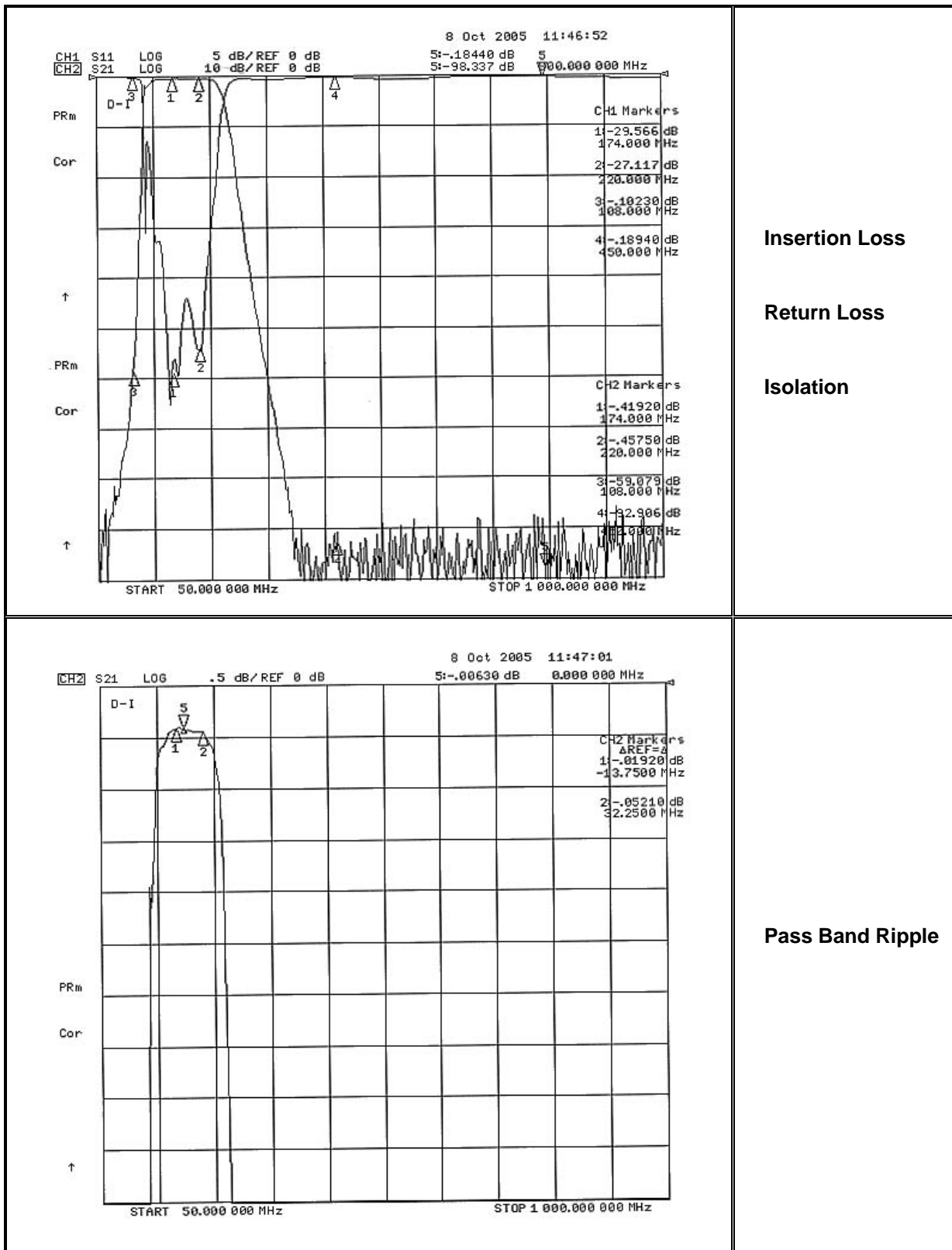
Return Loss

Isolation

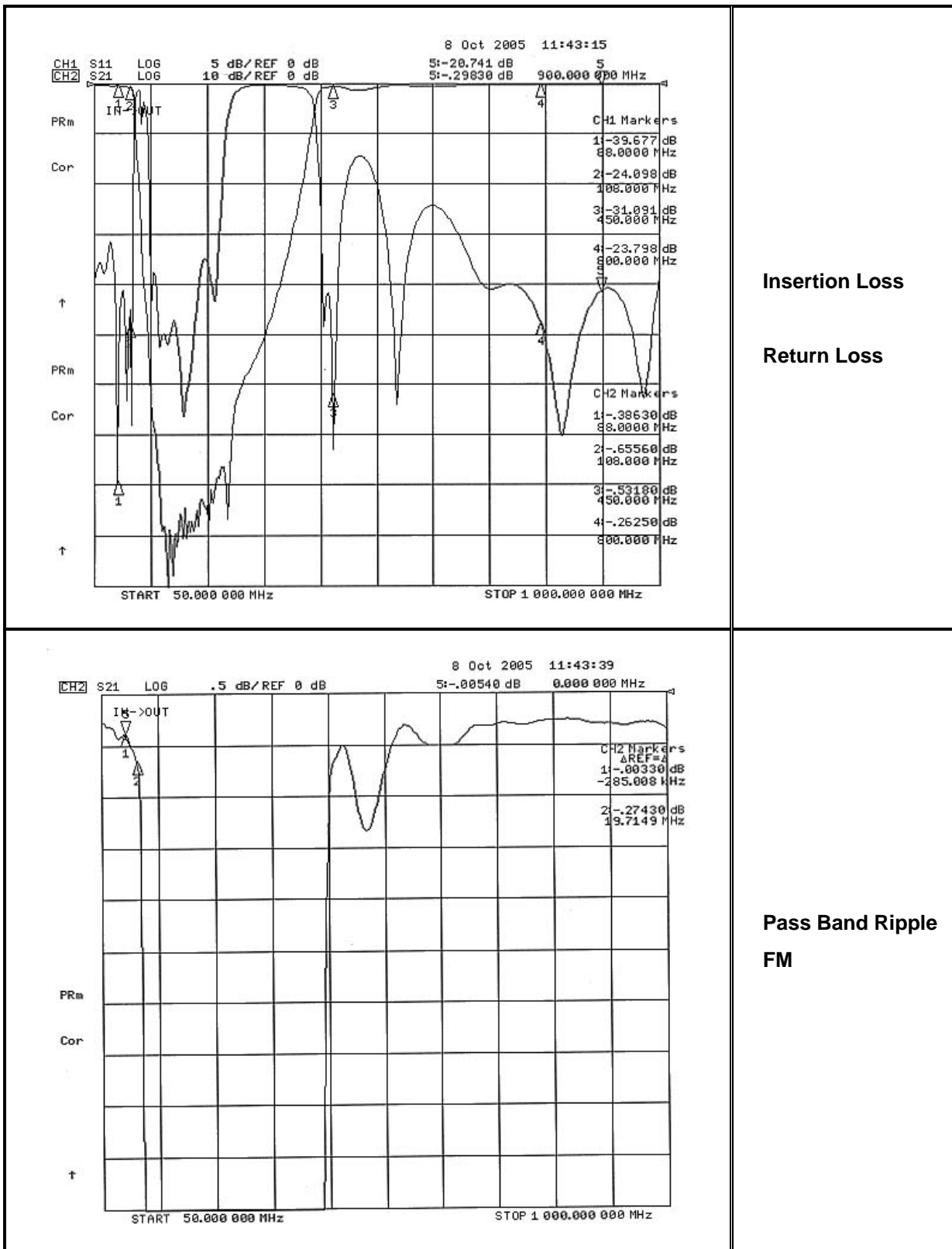


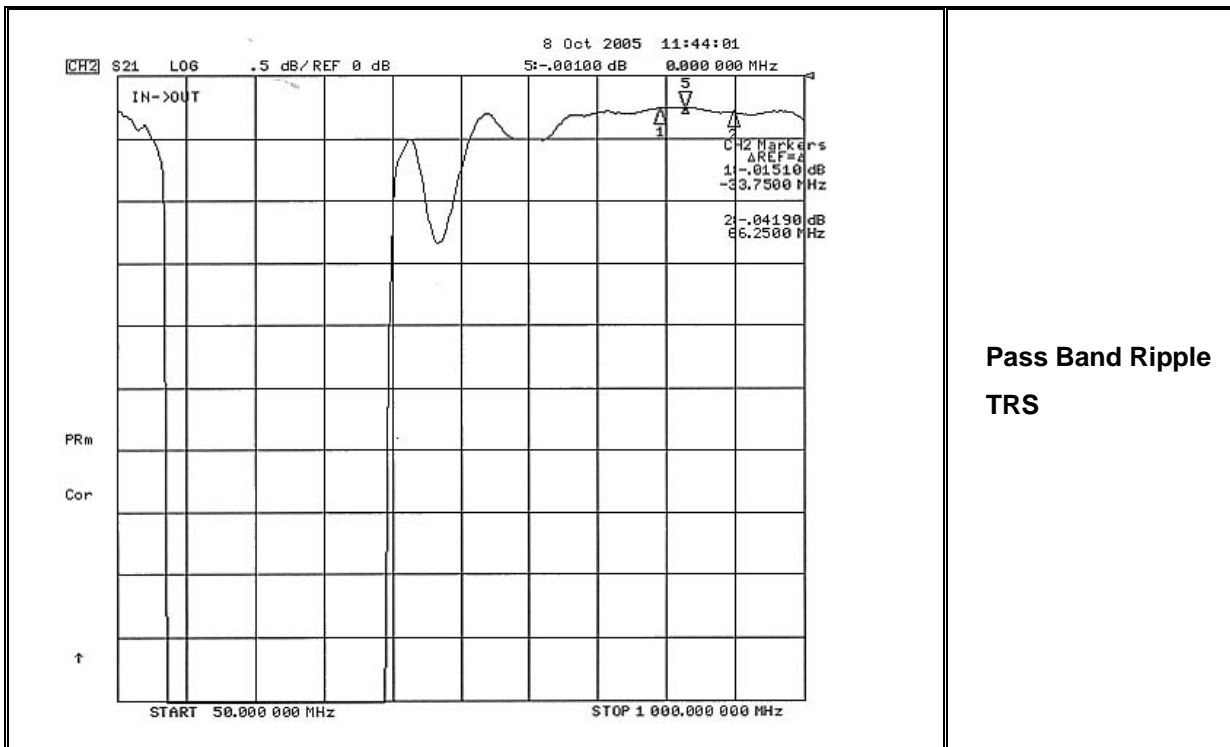
Pass Band Ripple

- T-DMB In → Out Path

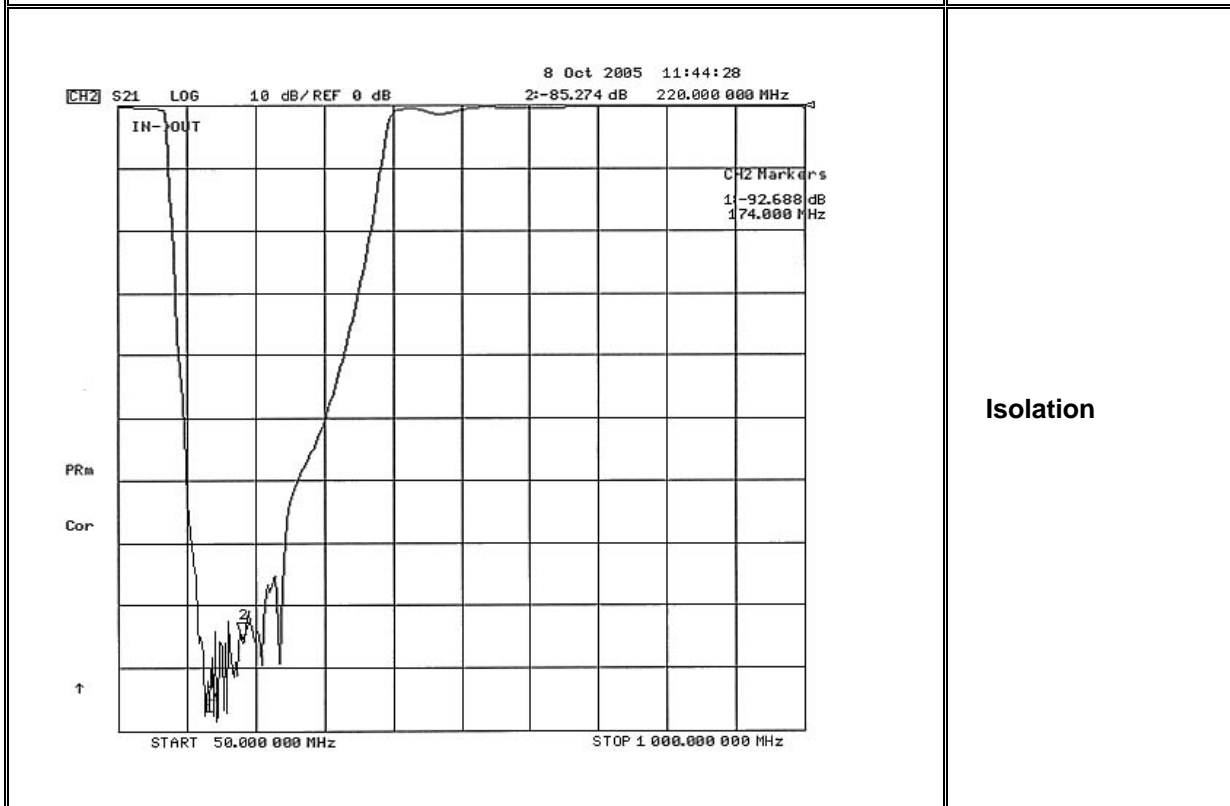


- In → Out Path





**Pass Band Ripple
 TRS**



Isolation