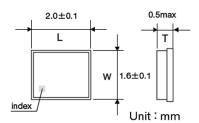
#### **Spec Sheet**

# FBAR/SAW Devices (SAW Duplexers)

# D5PF773M0M3Y6



#### Features

- Item Summary
  SAW, Duplexer, 2.0x1.6x0.5mm
  Band28
- Lifecycle Stage
   Mass Production
- Standard packaging quantity (minimum)
   Taping Embossed 3000, 15000pcs

#### Products characteristics table

System	LTE
Туре	SAW
Function	Duplexer
band	Band28
Insertion Loss (typ) (Tx-ANT/ANT-Rx)	1.8/2.3 dB
Isolation (typ)	60/53 dB
Operating Temp. Range	-20 to +85 ℃
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

#### ■ External Dimensions

Dimension L	2.0 ±0.10 mm
Dimension W	1.6 ±0.10 mm
Dimension T	Max 0.5 mm

2017.05.01



Customer Name	Standard	TAIYO YUDEN Mo	obile Technology Co.,Ltd.
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final

**Table 1. Electrical Specification** 

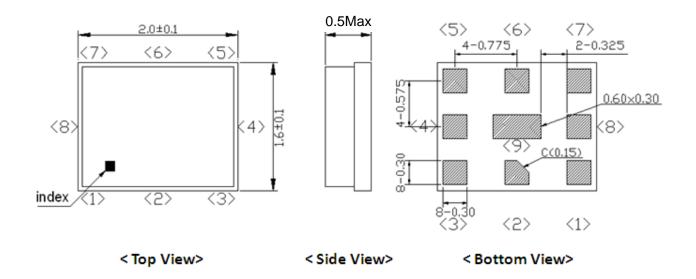
			lable 1. Ele	<u>ectrical</u>	Specific	cation		
Item		Condition	(	Specification	ו	Unit	Remarks	
			(MHz)	Min	Тур	Max	Offic	Remarks
Tx	Insertion	loss	703~733	-	1.8	3.1	dB (*1)	
to	Ripple		703~733	-	0.8	2.5	dB	
ANT	VSWR	ANT	702 722	-	2.0	2.3	-	
	VSVVR	Tx	703~733	-	2.0	2.3	-	
	Input pov	ver	703~733	CW ton	e, +29dBm,	5000H	-	Ta=50°C
	Absolute	attenuation	10~694	33	38	-	dB	
			694~698	2.5	16	-	dB	
			758~788	47	52	-	dB	
			788~803	30	43	-	dB	
			1406~1466	35	46	-	dB	
			1565~1606	45	52	-	dB	
			2109~2199	45	58	-	dB	
			2400~2500	45	56	-	dB	
ANT	Insertion	loss	758~788	-	2.3	2.8	dB (*1)	
to	Ripple		758~788	-	0.7	1.6	dB	
Rx	VSWR	ANT	758~788	-	1.8	2.2	-	
	VOVIK	Rx	150~100	-	2.1	2.4	-	
	Absolute	attenuation	703~733	50	60	-	dB	
			2400~2500	45	51	-	dB	
Tx to	loolotion		703~733	56	60	-	dB	
Rx	Rx Isolation		758~788	50	53	-	dB	
Termir	Terminating Impedance  Tx port  Rx port  Ant port		Tx port		50 + 12nH		Ohm	Single-ended
			Rx port		50		Ohm	Single-ended
			Ant port	50 // 10nH		Ohm	Single-ended	
Operating Temperature		-20 to +85			۰C			
Device	e size (LxV	/xH)		2.0(typ) x	1.6(typ) x	0.5(max)	mm	

<sup>(\*1)</sup> Specification of insertion loss excludes loss that comes from the test board.



Customer Name	Standard	TAIYO YUDEN M	obile Technology Co.,Ltd.
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final

### **Dimensions**



Unit: mm

### **Pin Configuration**

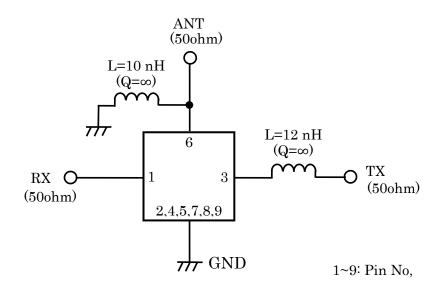
Pin No.	Pin name	Description
1	Rx	Receiver Pin
2	GND	Ground Pin
3	Tx	Transmitter Pin
4	GND	Ground Pin
5	GND	Ground Pin
6	ANT	Antenna Pin
7	GND	Ground Pin
8	GND	Ground Pin
9	GND	Ground Pin

Figure 1. Dimensions and Pin assignment



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Lt		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

#### **Evaluation Circuit**



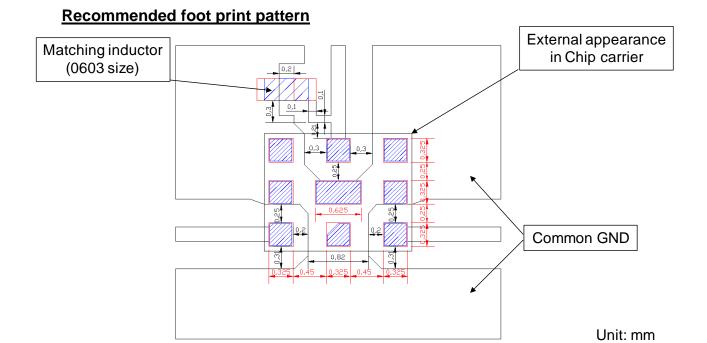
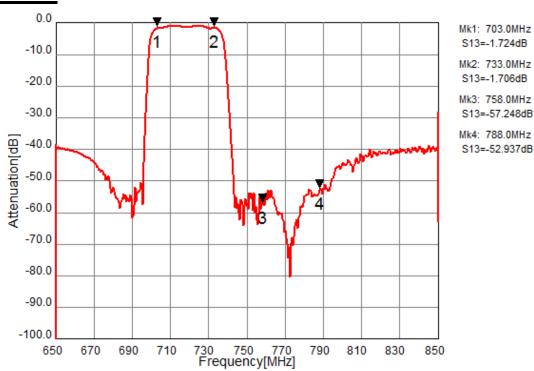


Figure 2. Recommended foot print pattern



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

## Tx to Ant



### Ant to Rx

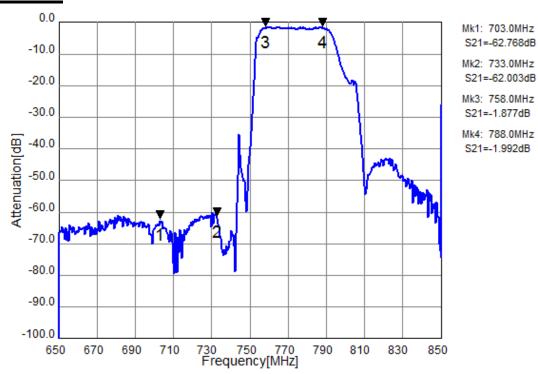


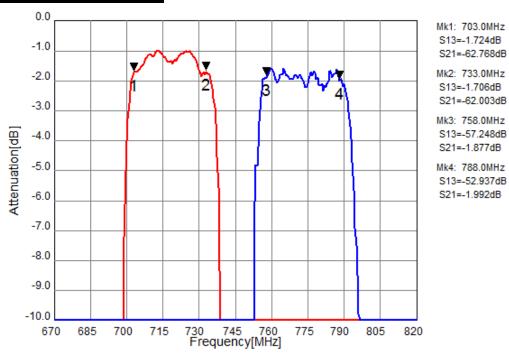
Figure 3-1. Electrical Characteristics

These data exclude loss that comes from the test board.



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

### Tx to Ant, Ant to Rx



### Tx to Rx Isolation

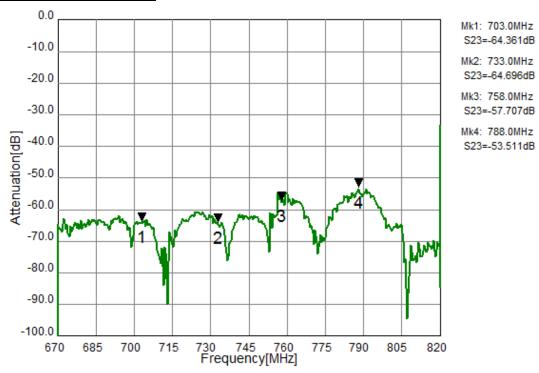


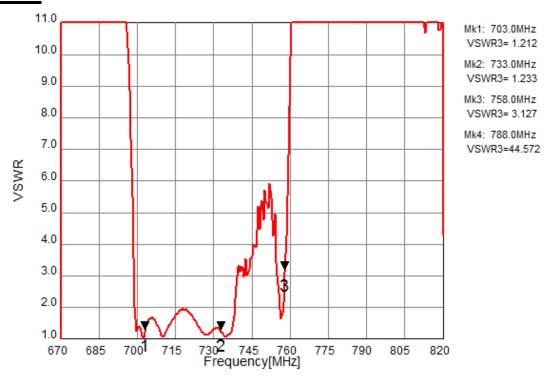
Figure 3-2. Electrical Characteristics

These data exclude loss that comes from the test board.



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

## **Tx Port**



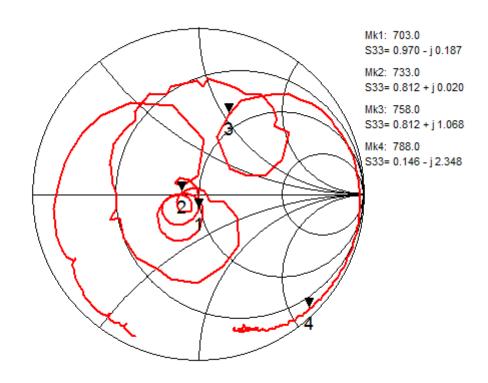
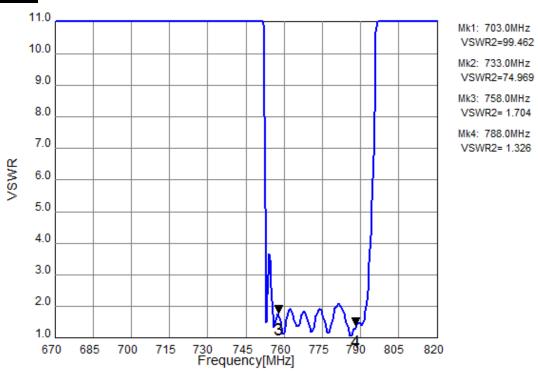


Figure 3-3. Electrical Characteristics



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

## **Rx Port**



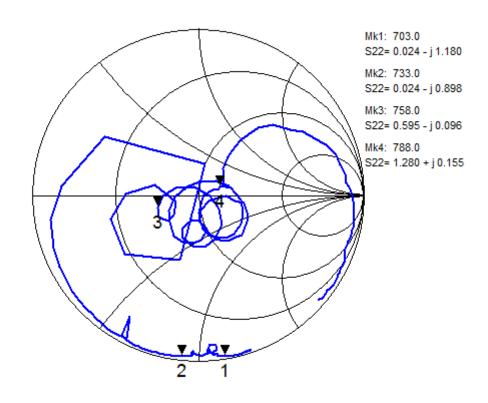
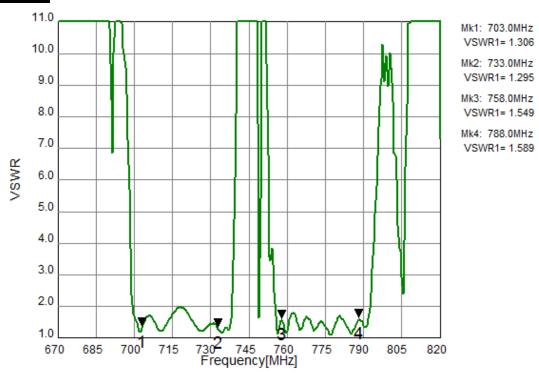


Figure 3-4. Electrical Characteristics



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

# **Ant Port**



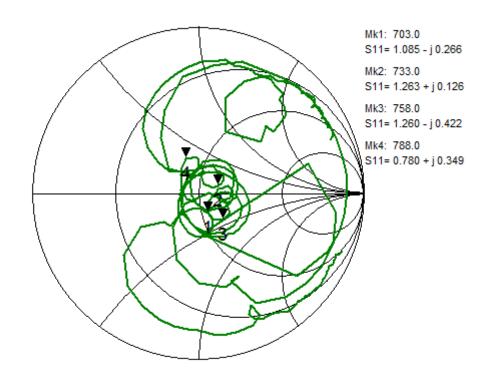
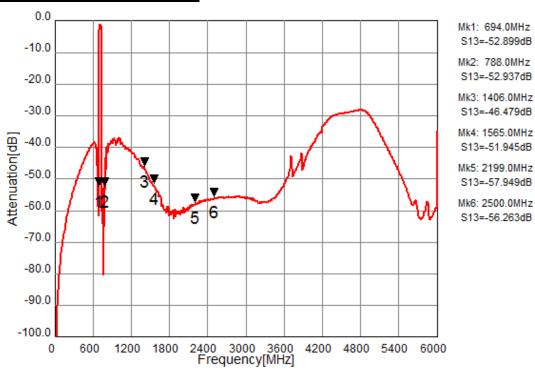


Figure 3-5. Electrical Characteristics



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

## Tx to Ant (Wide span)



# Ant to Rx (Wide span)

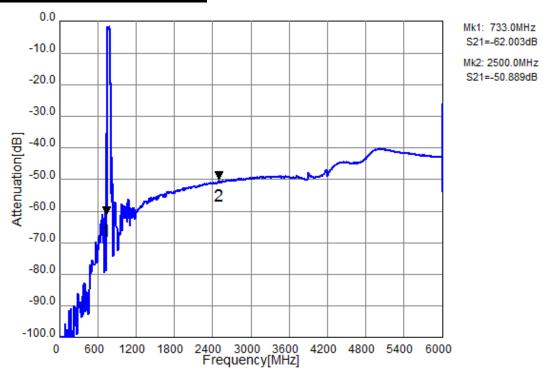


Figure 3-6. Electrical Characteristics





Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

# Tx to Rx (Wide span)

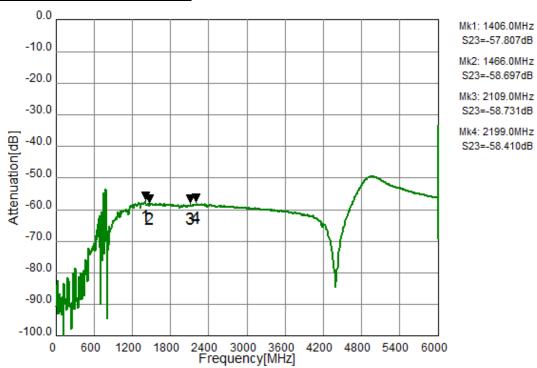


Figure 3-7. Electrical Characteristics





Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.		
System	Band 28 Block A Duplexer	Date	Apr. 4, 2014	
Part Number	D5PF773M0M3Y6	Version 2.1bbB	Final	

#### Ordering Code

Ordering Code	Packing	Reel size	Status
D5PF773M0M3Y6-Z	Tape & Reel	3,000 pcs.	MP
D5PF773M0M3Y6-ZA	Tape & Reel	less than 3,000 pcs.	MP
D5PF773M0M3Y6-Y	Tape & Reel	15,000 pcs.	MP
D5PF773M0M3Y6-YA	Tape & Reel	less than 15,000 pcs.	MP
D5PF773M0M3Y6-Q	Bulk	few pcs.	MP

<sup>\*</sup>Minimum order quantity (MOQ) is assigned for each inquiry, Please contact to Sales Representatives..

#### **Notice**

All of the contents specified herein are subject to change without notice due to technical improvements, etc.

Please contact Taiyo Yuden Co., Ltd. for further details of product specifications.

Please conduct validation and verification of products in actual condition of mounting and operating environment before commercial shipment of the equipment.

This product is for general electronics equipment such as Audio-Visual equipment, household electronics, office supplies, information services and telecommunications; therefore, in case this product is used for any medical equipment, space equipment, nuclear equipment or disaster prevention equipment, please contact Taiyo Yuden in advance.

In case this product is used for general electronics equipment or circuits which require high safety and high reliability, thoroughly evaluate on safety and add a protection circuit if necessary.



<sup>\*</sup>MP: Mass Production