



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: 1206.9225 / 1582.1875 MHz SAW Diplexer SMD 5.0x5.0 mm

TST Part No.: TE0130B

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ David Chang *David*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/02/12

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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1206.9225 / 1582.1875 MHz SAW Diplexer

MODEL NO.: TE0130B

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dB_m
2. DC voltage: 3 V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

(Band 1_1582.1875 MHz)

Item	Unit	Min.	Typ.	Max.
Center frequency F_c	MHz	-	1582.1875	-
Insertion Loss (1559~1605.375 MHz) IL	dB	-	3.8	5.4
Amplitude Ripple (1559~1605.375 MHz)	dB	-	0.6	2.4
Return Loss (1559~1605.375 MHz)	dB	6	13	-
Attenuation (Reference level from 0 dB)				
10 ~ 1330 MHz	dB	32	38	-
1660 ~ 2000 MHz	dB	27	33	-

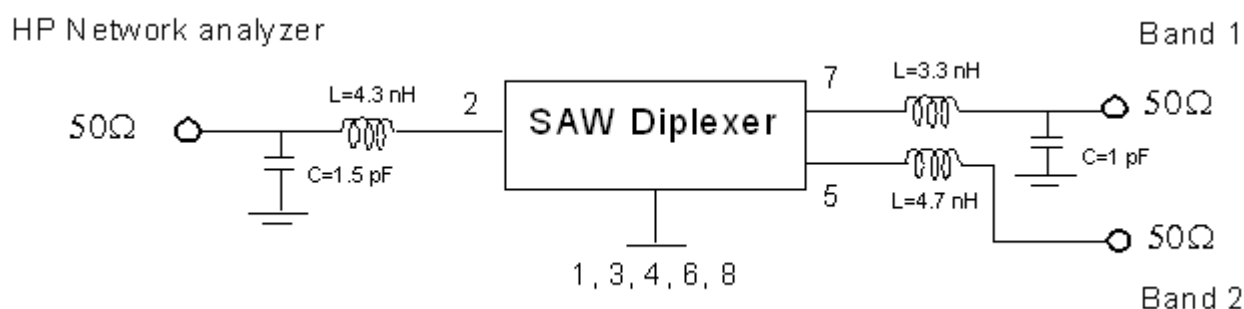
(Band 2_1206.9225 MHz)

Item	Unit	Min.	Typ.	Max.
Center frequency F_c	MHz	-	1206.9225	-
Insertion Loss (1165.22~1248.625 MHz) IL	dB	-	4.2	6.0
Amplitude Ripple (1165.22~1248.625 MHz)	dB	-	1.2	2.8
Return Loss (1165.22~1248.625 MHz)	dB	6	8	-
Attenuation (Reference level from 0 dB)				
10 ~ 1110 MHz	dB	17	23	-
1320 ~ 2000 MHz	dB	20	28	-

(Band 1 – Band 2)

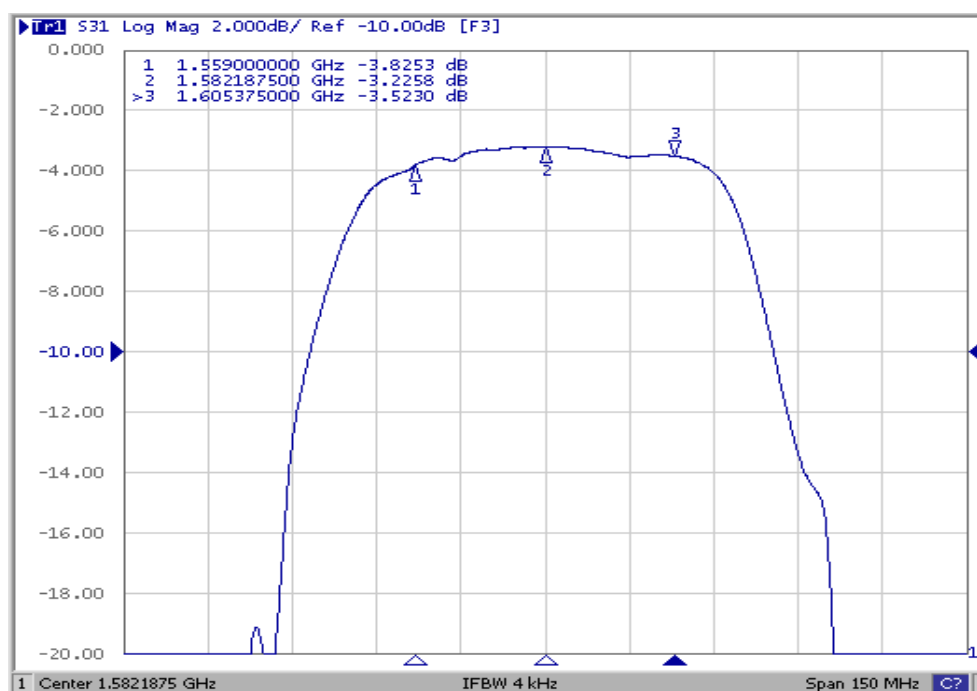
Item	Unit	Min.	Typ.	Max.
Isolation (1165.22~1248.625 MHz)	dB	22	35	-
Isolation (1559~1605.375 MHz)	dB	22	31	-

C. MEASUREMENT CIRCUIT:

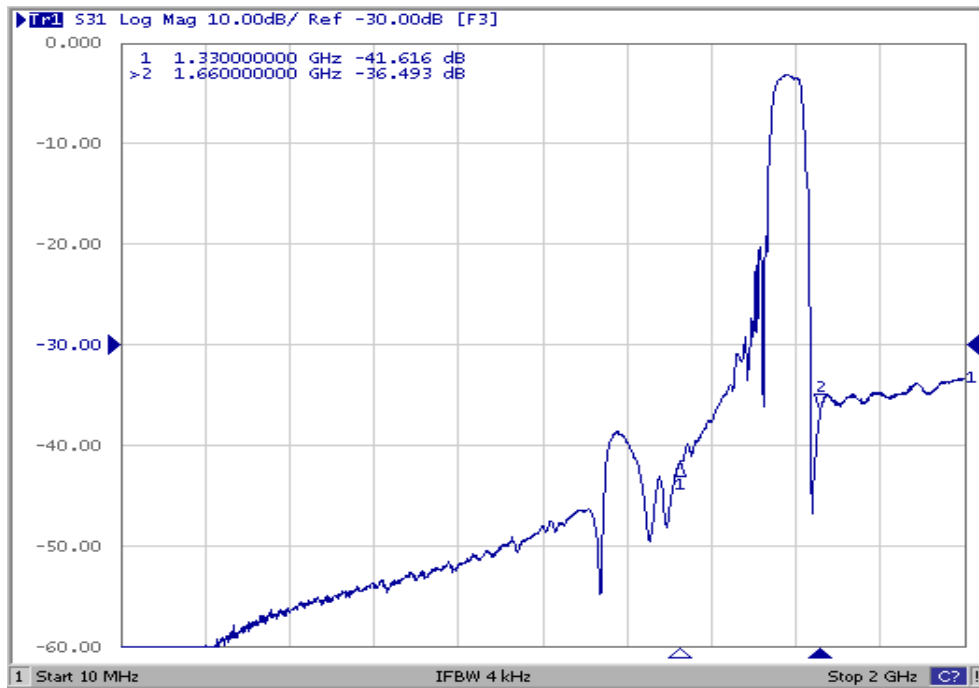


D. Frequency Characteristics:

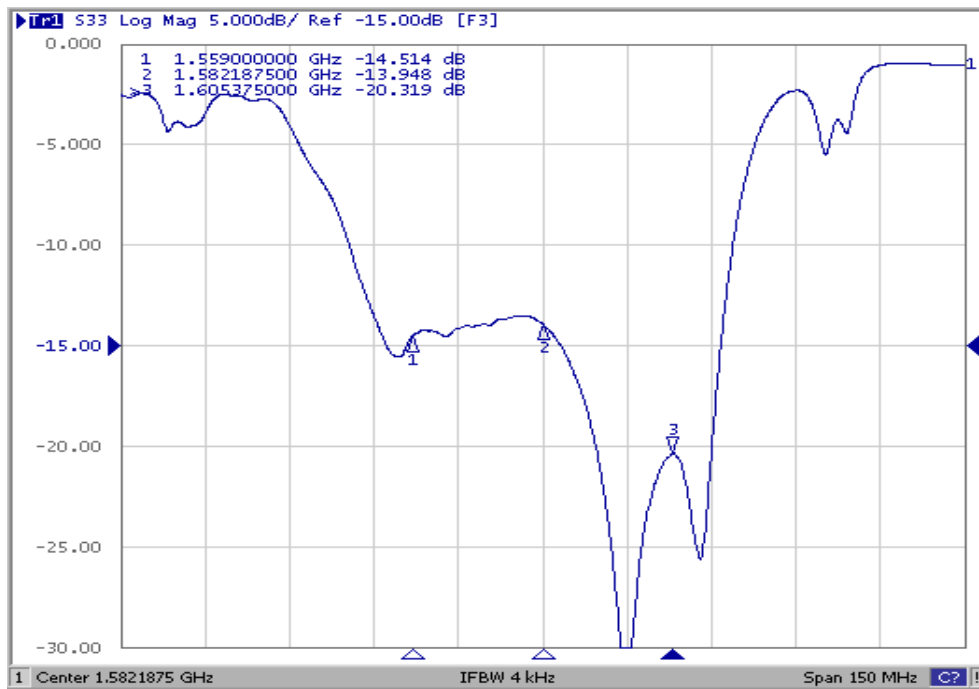
Band 1 _ Characteristic



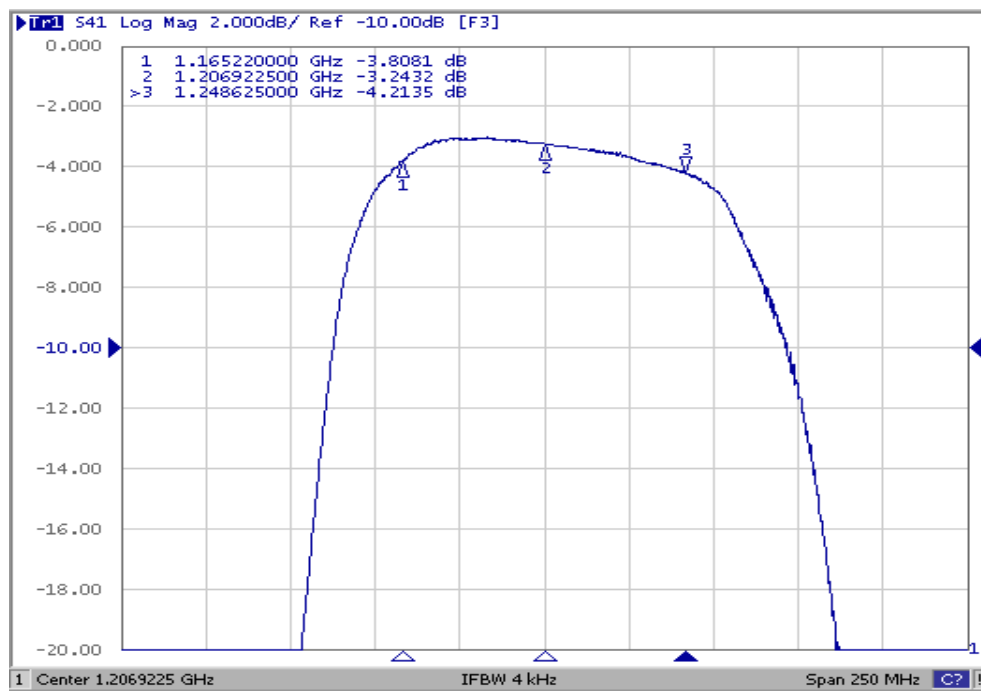
Band 1 _ Characteristic (wideband)



Band 1 _ Return loss



Band 2 _ Characteristic



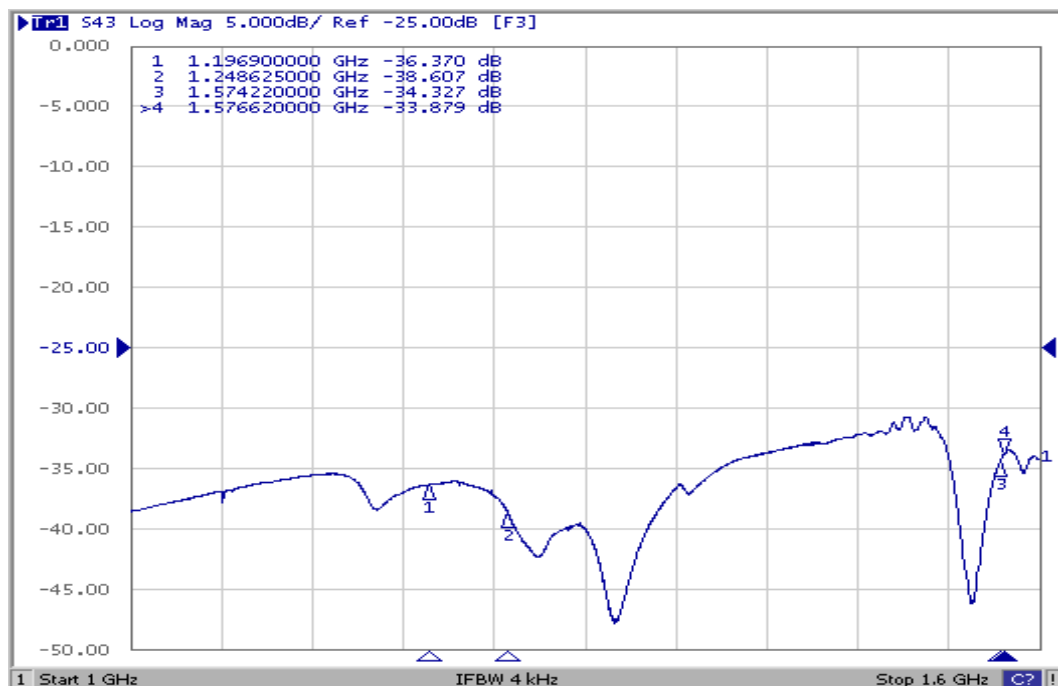
Band 2 _ Characteristic (wideband)



Band 2 _ Return loss

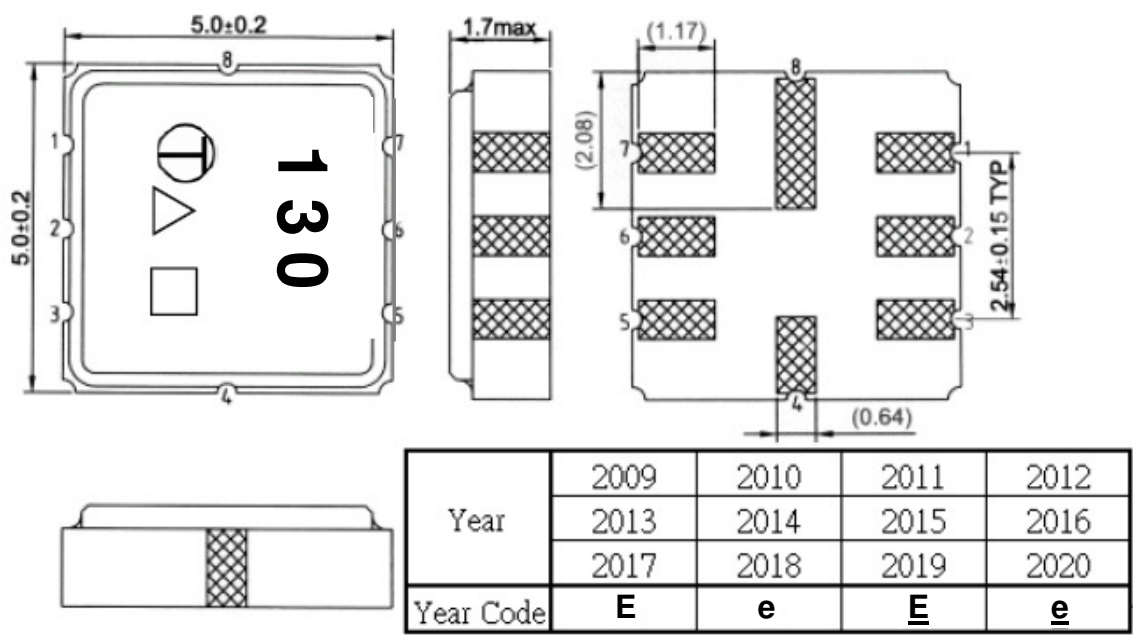


Band 1 – Band 2_Isolation



Preliminary

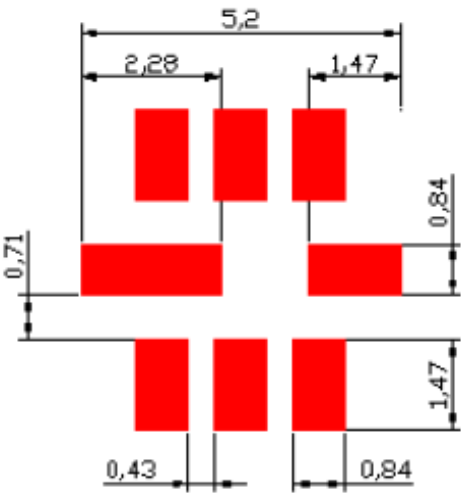
E. OUTLINE DRAWING:



- #2: Input
 - #5: Band 2 Output
 - #7: Band 1 Output
 - #4, 8: Case Ground
 - #1, 3, 6: Ground
- Unit: mm

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

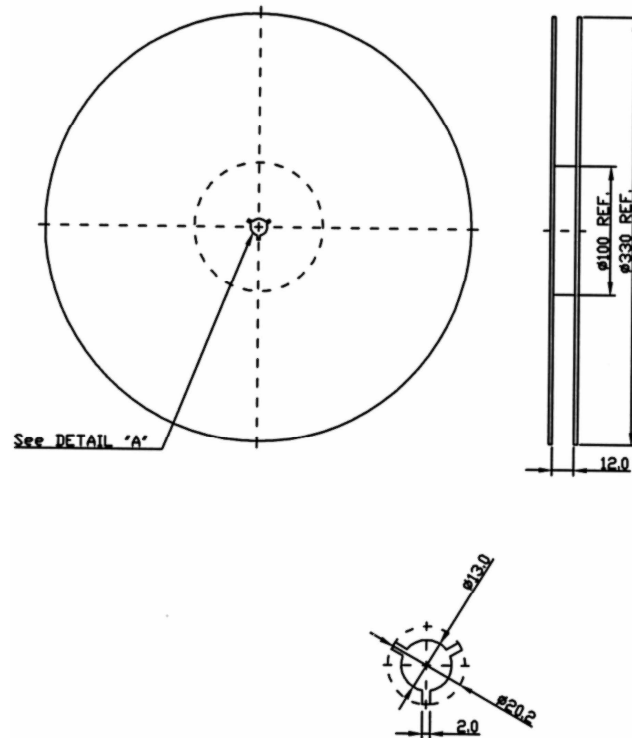
F. OUTLINE DRAWING:



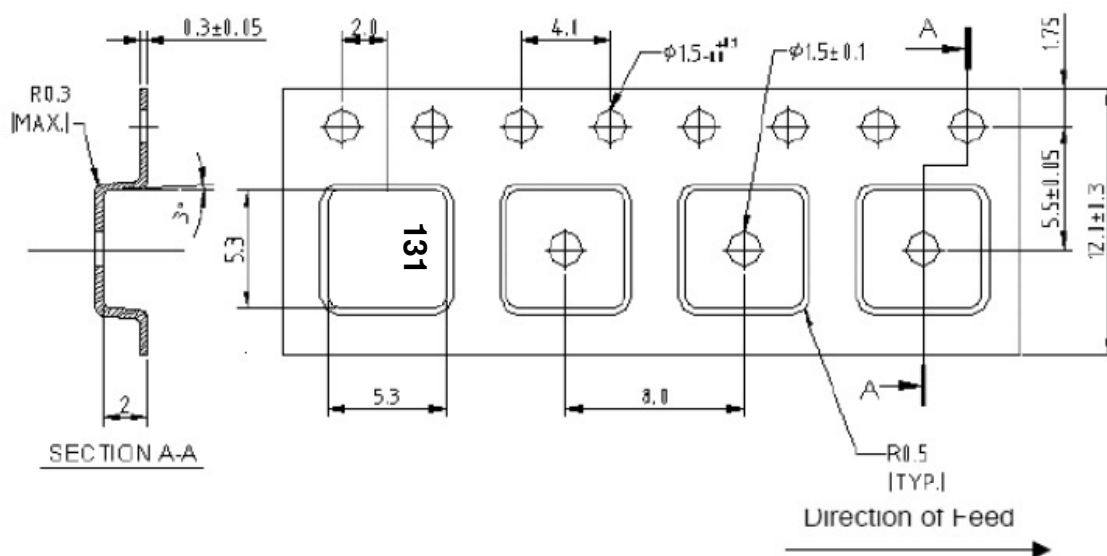
G. PACKING: (Ref. WI-75M03)

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.

