规格书编号

SPEC NO: SJKAF1588ECLYC

产品规格书
SPECIFICATION

CUSTOMER 客 户：

PRODUCT 产 品：SAW FILTER

MODEL NO 型 号：SJKAF1588ECLYC

MARKING 印 字：● C4

PREPARED 编 制： CHECKED 审 核：

APPROVED 批 准： D A T E 日 期：2022-7-13

客户确认 CUSTOMER RECEIVED:		
审核 CHECKED	批准 APPROVED	日期 DATE

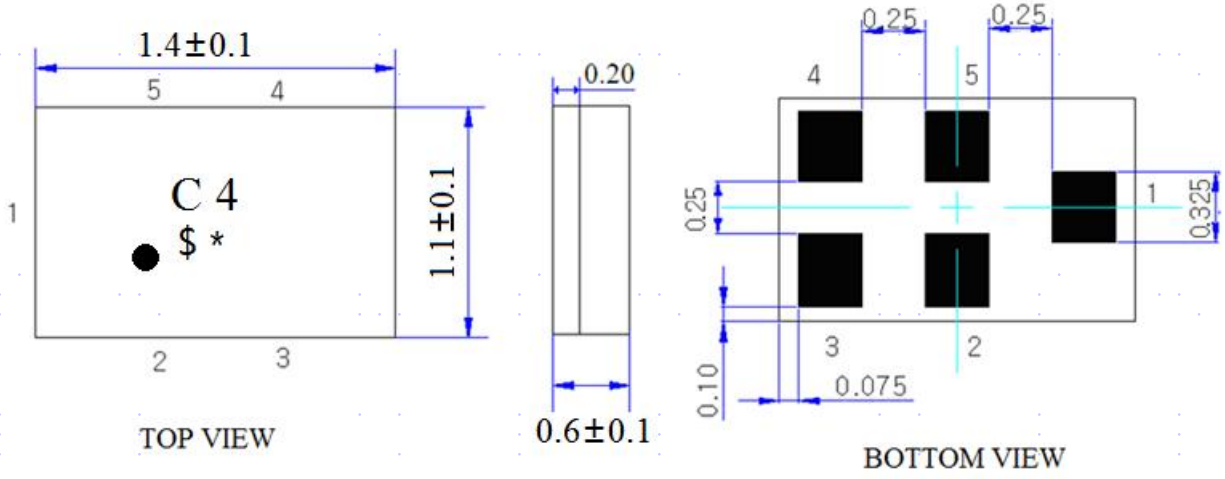
更改历史记录
History Record

更改日期 Date	规格书编号 Spec. No.	产品型号 Part No.	客户产品型号 Customer No.	更改内容描述 Modify Content	备注 Remark
2022-7-13	SP01	HDF1588EC L-B2		New specification. Car level.	

1. Application

- Low-loss RF GPS + COMPASS + GLONASS filter
- Usable passband: 2.0 MHz for GPS, 4.092 MHz for COMPASS and 8.34 MHz for GLONASS
- Impedance 50 ohm input and output
- Unbalanced to unbalanced operation
- RoHS compatible
- Comply with AECQ200
  (Specifically according to **7.Reliability test item & conditions**)

2. Package Dimension (PKG SIZE 1.4 x 1.1mm)



Marking: Laser Printing

$: EIAJ Code

(Refer to the table 1)

∗: Date Code

(Refer to the table 2)

Pin configuration

1. Input
4. Output
2,3,5 To be grounded

Table 1 $: EIAJ Code

This rule of code is applied repeatedly every four year.

2019 2023 2027	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	A	B	C	D	E	F	G	H	J	K	L	M
2020 2024 2028	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	N	P	Q	R	S	T	U	V	W	X	Y	Z
2021 2025 2029	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	a	b	c̄	d	e	f	g	h	j	k	l	m
2022 2026 2030	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	n	o	p	q	r	s	t	u	v	w	x	y

Table 2 *: Date Code

date	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
code	A	B	C	D	E	F	G	H	J	K
date	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th
code	L	M	N	P	Q	R	S	T	U	V
date	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st
code	W	X	Y	Z	a	b	c̄	d	e	f	**g**

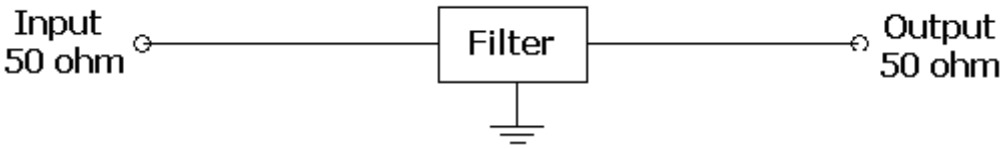
3. Maximum Rating

Items	Conditions
Operation temperature rang	-40℃ ~+105℃
Storage temperature rang	-40℃ ~+105℃
ESD voltage Sensitive discharge device	ESD(MM) : 50VDC ESD(HBM) : 175VDC
DC Voltage VDC	5V
Max Input Power	50℃ 15dBm CW 2000h
Moisture Sensitivity Level	MSL 2

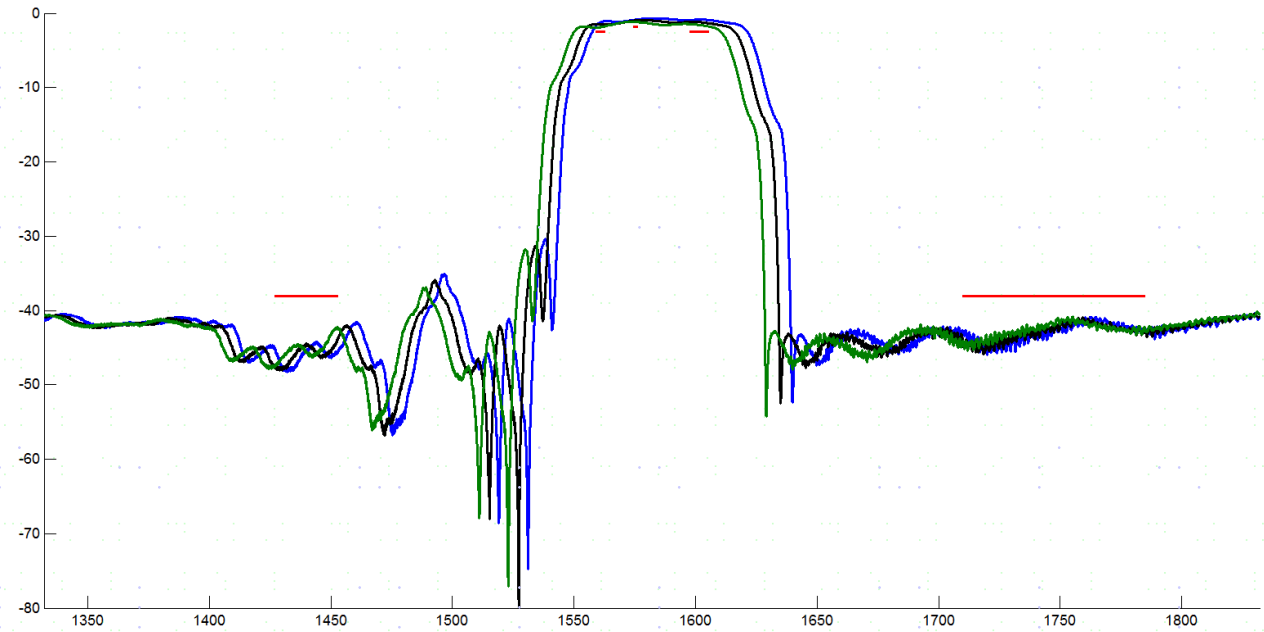
4. Electrical characteristics -40~105℃

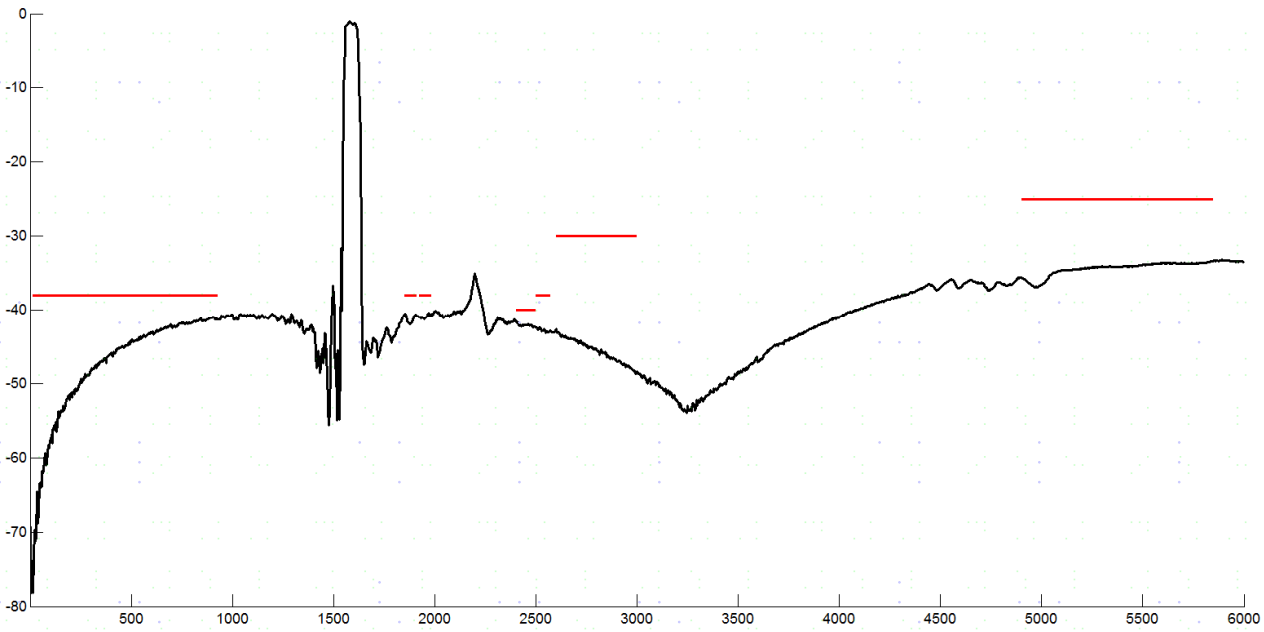
	Unit	Min	Typ	Max
Center Frequency	MHz	-	1582.4	-
Insertion Loss				
1574.42~1576.42 MHz	dB		1.3	1.8
1559.05~1563.15 MHz			1.8	2.5
1597.78~1605.66 MHz			1.8	2.5
VSWR				
1559.05~1563.15 MHz	dB		1.6	2.2
1573.37~1577.47 MHz			1.4	2.0
1597.78~1605.66 MHz			1.6	2.2
Group delay ripple	ns			
1597.78~1605.66 MHz			5	20
Attenuation				
10~824 MHz	dB	38	43	-
824~925 MHz		38	42	
1427~1453 MHz		38	43	
1710~1785 MHz		38	43	
1850~1910 MHz		38	44	
1920~1980 MHz		38	44	
2400~2500 MHz		40	45	
2500~2570 MHz		38	44	
2600~3000 MHz		30	38	
4900~5850 MHz		25	35	
Input/Output Impedance	Ohms		50	

5. Test Circuit



6. Frequency Characteristics





7. Reliability test item & condition

Category	Reliability test items		Test condition	Qty.	Description
Test data before Experiment			Test instrument：Network Analyzer TEST Temperature :25℃	321	HDDB05CNSS-B11 SPEC
Environment Test	0	Preconditioning	3 times reflow 255℃ -0/+5℃	231	J-STD-020D
	1	High temperature storage	125±5℃ 1000h	77	MIL-STD-202 Method 108
	2	High temperature humidity	85℃ 85%RH 1000h	77	MIL-STD-202 Method 103
	3	Thermal Shock	-55℃/30min~ +125 ℃/30 min 1000 cycle transition time:<10s	77	JESD22 Method JA-104
Mechanical Test	4	Mechanical Shock	Shock pulse of 1500g with pulse duration of 0.5+/-0.1 msec (X,Y & Z) 5 shocks per axis	30	MIL-STD-202 Method 213
	5	Vibration	10 to 2000Hz,1.52mm ampl,196m/S2 ,4cycles/axis,4min/cycles, 3axis(X,Y,Z)	30	MIL-STD-202 Method 204
Physical Test	6	Soldering heat resistance	Reflow with 260℃ peak, 3 times	30	MIL-STD-202 Method 210
	7	Bend	支架相距 90mm PCB 水平下压 2mm 1sec 5times	10	AEC-Q200-005
	8	Terminal Strength/Shear	18N，60S	10	AEC Q200-006
	9	Solder ability test	235±5℃ 3 sec. （Solder bath）	10	J-STD-002
Electrical Characterization	10	Human Body Model ESD	HBM:1.5KOhm，100PF	3	JESD22-114

8. REMARK

8.1 Static voltage

Static voltage between signal load & ground may cause deterioration &destruction of the component. Please avoid static voltage.

8.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning

8.3 Soldering

Only leads of component may be solded. Please avoid soldering another part of component.

9. Packing

9.1 Dimensions

(1) Carrier Tape: Figure 1

(2) Reel: Figure 2

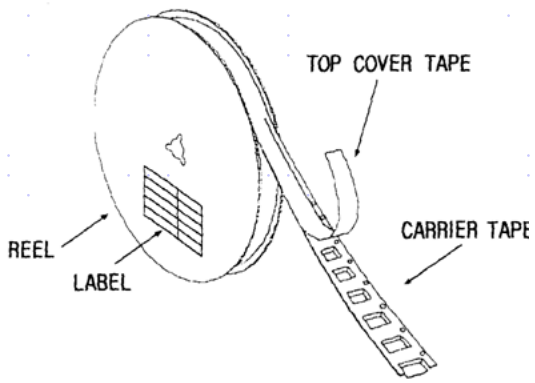
(3) The product shall be packed properly not to be damaged during transportation and storage.

9.2 Reeling Quantity

10000 pcs/reel Φ258mm

9.3 Taping Structure

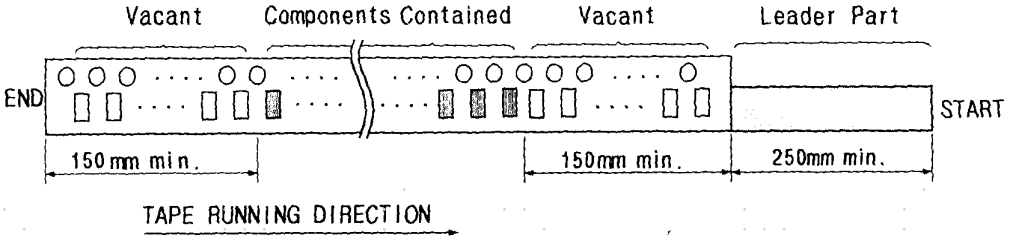
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

Device Name	
Marking	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.



10. TAPE SPECIFICATIONS

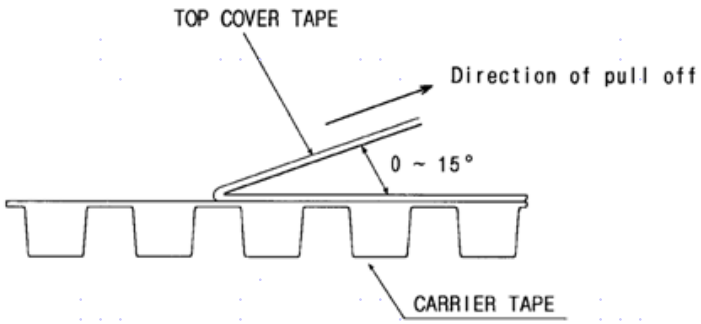
10.1 Tensile Strength of Carrier Tape: 4.4N/mm width

10.2 Top Cover Tape Adhesion (See the below figure)

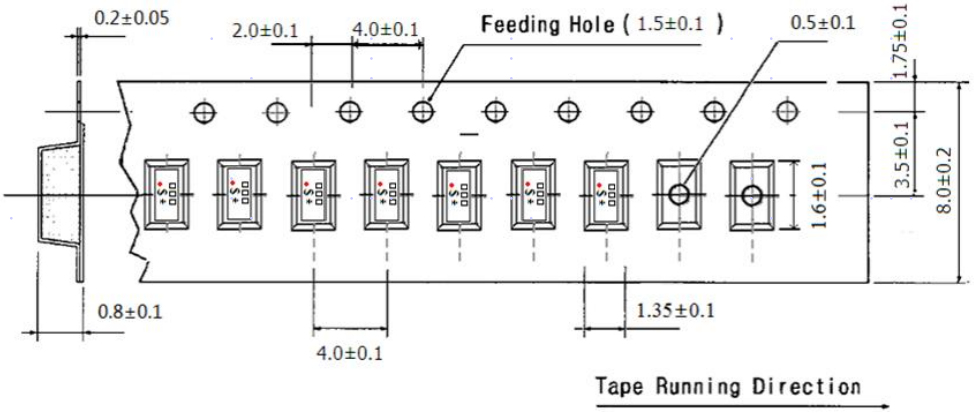
(1) pull off angle: 0~15°

(2) speed: 300mm/min.

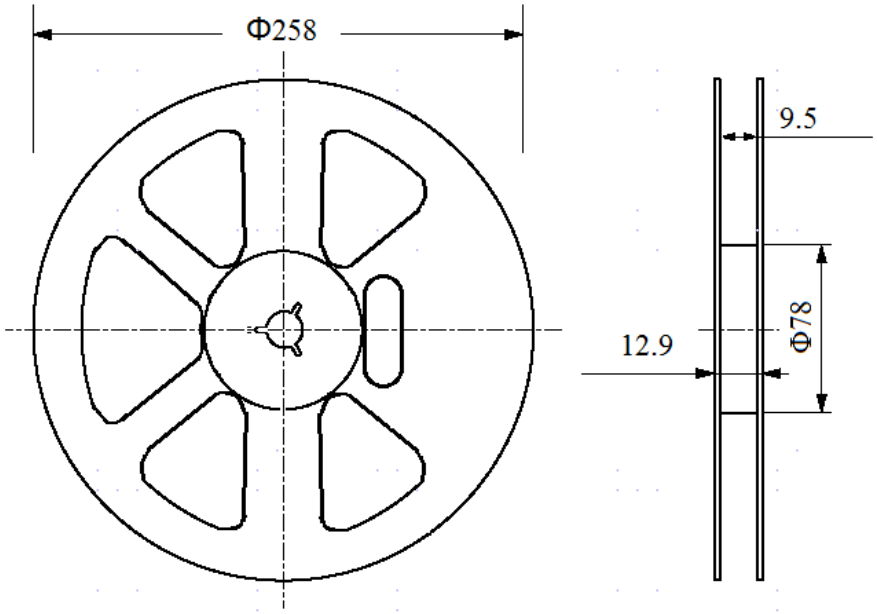
(3) force: 20~70g



[Figure 1] Carrier Tape Dimensions



[Figure 2]10000 pcs/reel Φ258mm



Reel Dimension (in mm)