

SPECIFICATION

PRODUCT NAME: DIELECTRIC FILTER ELEMENT

PART NUMBER: DFC1575P

Approved by	Checked by	Drawn by



SINOCERAMICS,INC.

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Sinoceramics, Inc.

Approval Sheet	
Customer	
Supplier P/N	DFC1575P
Customer P/N	

Customer's Approval Certificate	
Checked & Approval By	
Date	

Remark:

Signature:

Date:

Please return this copy as a certification of your approval.

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1.0 SCOPE

This specification shall cover the characteristics of the dielectric filter element with the type DFC1575P.

*The SMD Filter have make up of twain resonator together.

*The material is (NdBa)TiO₃ ceramics, and printing Ag/Cu electrode.

*High dielectric constant ($\epsilon_r=92$), and small size.

*Low intervene loss and credible stability in high temperature ($T_{cf}=0 \pm 10\text{ppm/K}$).

*The attenuation is high for firstly and secondly syntonc frequency.

*Good solder.

2.0 PART NO. OF DIELECTRIC FILTER ELEMENT

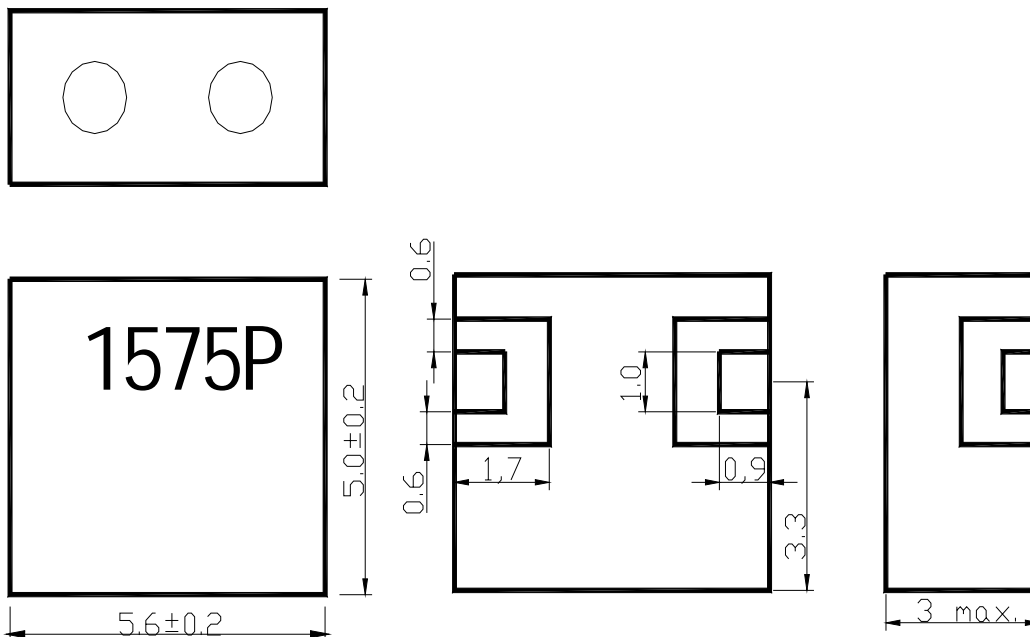
PART NUMBER	CUSTOMER PART NO.	SPECIFICATION NO.
DFC1575P		

3.0 OUTLINE DRAWING AND DIMENSIONS

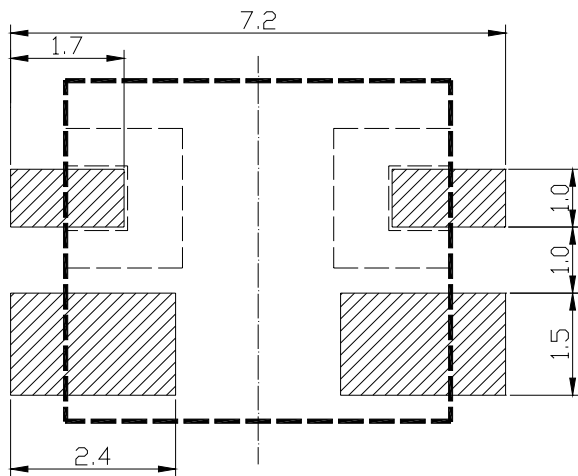
3.1 Appearance: No visible damage and dirt.

3.2 Except the pin, the materials don't contain lead.

3.3 Dimensions(mm)



3.4 Land Pattern (recommended)



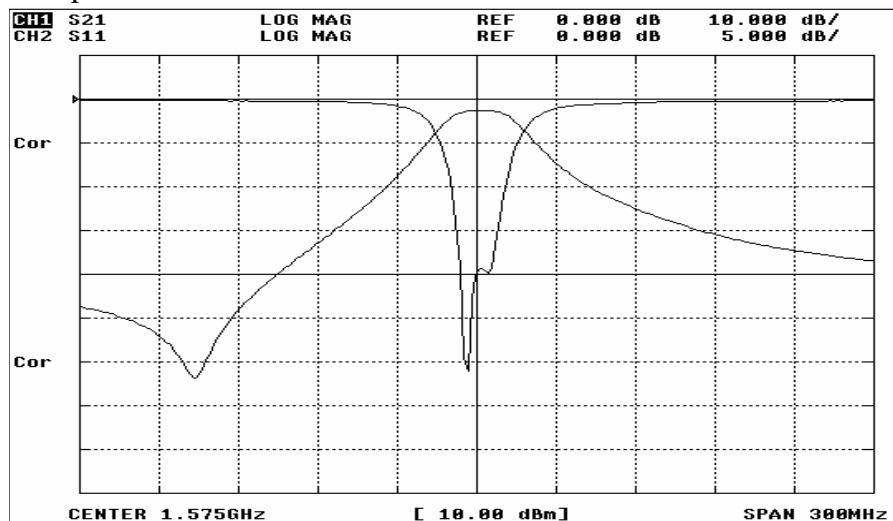
4.0 ELECTRICAL SPECIFICATIONS

4.1 Performance Characteristics

Table 1

Items	Content
Center frequency MHz	1575.0
Intervene Loss dB max	3.0
Band-pass MHz min	10.0
Wave excursion dB max	0.5
SWR max	2.0
Impedance	50
Attenuation dB min	--
Loss $f_c - 50$ MHz	19
Loss $f_c + 50$ MHz	15

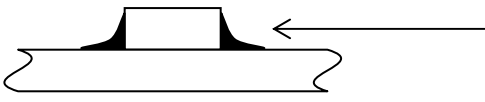
4.2 Band-pass Characteristic



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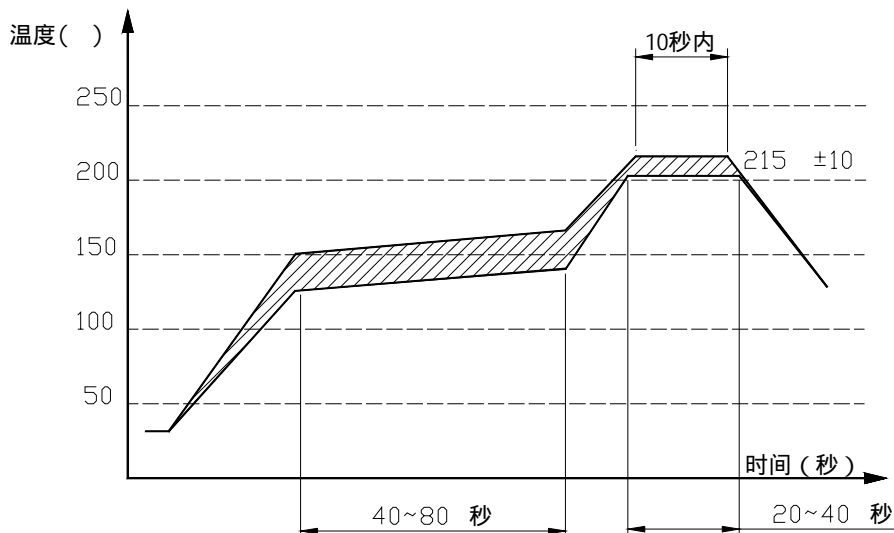
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5.0 ENVIRONMENTAL TEST

No.	Item	Test Condition	Remark
5.1	Working Temperature	The range is -35 ~85	It shall fulfill the spec. in 4.1Table 1
5.2	High Temperature Exposure	The device shall satisfy the specification in table 1 after leaving at 90 for 96h~98h,provided it would be measured after 2h~4h leaving in 25 ± 5 and less than 65% relative humidity.	It shall fulfill the specifications in 4.1 Table 1.
5.3	Low Temperature	The device shall satisfy the specification in table 1 after leaving at -40 for 96h~98h,provided it would be measured after 2h~4h leaving in 25 ± 5 and less than 65% relative humidity.	It shall fulfill the specifications in 4.1 Table 1.
5.4	Thermo-Humidity	Subject the device to 40+/-2 and 90-95% relative humidity for after 96-98h.provided it would be measured after 2-4h leaving in 25 ± 5 and less than 65% relative humidity.	It shall fulfill the specifications in 4.1 Table 1.
5.5	Vibration	Subject the device to vibration for 15minute each in x、 y and z axis with the acceleration of 98 m/s ² ,the frequency 50-500Hz,and the vibration frequency 10-55Hz,the swing 1.5mm. And each axis need two traverse vibration(total 6 times),shall be varied uniformly between the limits of 10~50Hz,device to double vibration for 1.5mm,and 15minute at 50-500Hz and acceleration of 98.0665m/s ² for frequency test.	It shall fulfill the specifications In 4.1 Table 1.
5.6	Strike Test	The each surface of the 6 vertical plane of one another in axial direction to do 3 times testing.	It shall fulfill the spec. in 4.1 Table 1
5.7	Shear Intensity	It shall be soldered on PCB board, then according to the arrow that bring to bear the force of 5N,and keep 10+/-1sec.  Solder: Sn 60%, Pb 40%	It shall fulfill the spec. in 4.1 Table 1

6.0 THE CONDITION OF SOLDER

No.	Item	Content	Remark
1	Soldering Type	Reflow Soldering	Recommended
2	The temperature of soldering	235	2sec. Max.
5.8	The temperature of the top of the solder	225	10sec. Max.



NO.	Item	Content
1	The temperature of warm-up	120
2	The time of warm-up	60 to 300sec.
3	The temperature of soldering	270±10
4	The time of soldering	Each pin max. 3sec.

7.0 PACKAGE

To protect the products in storage and transportation, it is necessary to pack them (outer and inner package). On paper pack, the following requirements are requested.

7.1 Carrier Tape and Reel

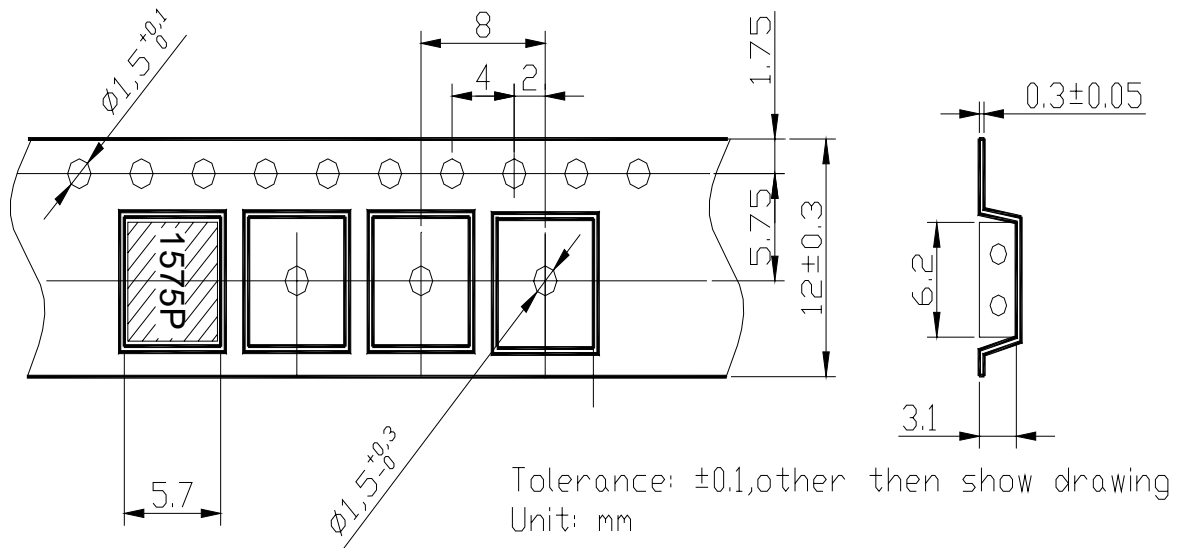
At the end of package, the warning (moisture proof, upward put) should be stick to it. Dimensions and Mark (see below)

The Reel: Diameter 330mm, 1000pcs/reel.

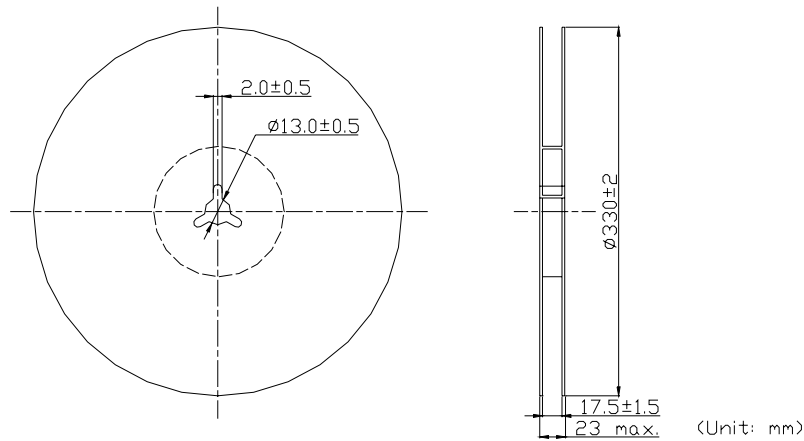
7.2 The Size Of Carrier Tape

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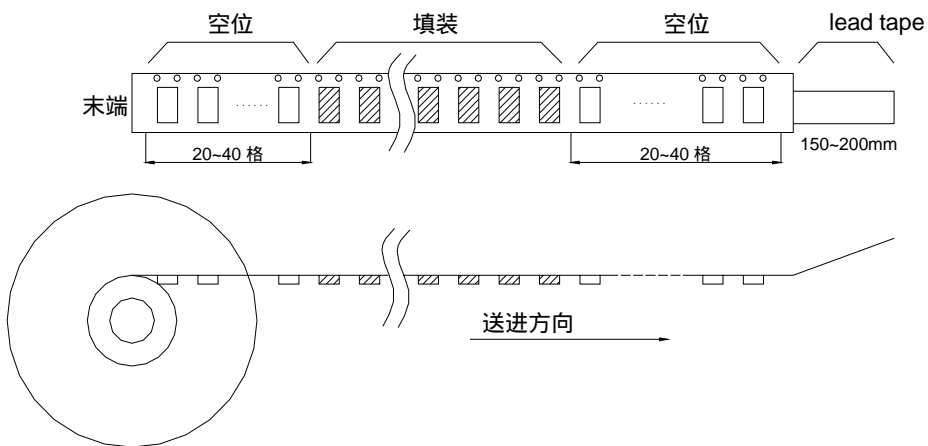
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7.3 The Size Of The Reel



7.4 The Top Tape



8.0 EIAJ MONTHLY CODE

2003 / 2005 / 2007 / 2009		2004 / 2006 / 2008 / 2010	
Month	Code	Month	Code
Jan.	A	Jan.	N
Feb.	B	Feb.	P
Mar.	C	Mar.	Q
Apr.	D	Apr.	R
May.	E	May.	S
Jun.	F	Jun.	T
Jul.	G	Jul.	U
Aug.	H	Aug.	V
Sep.	J	Sep.	W
Oct.	K	Oct.	X
Nov.	L	Nov.	Y
Dec.	M	Dec.	Z

9.0 OTHER

9.1 Caution of use

9.1.1 Please don't apply excess mechanical stress to the component and terminals at soldering.

9.1.2 The component may be damaged when an excess stress will be applied.

9.1.3 This specification mentions the quality of the component as a single unit. Please insure the component is thoroughly evaluated in your application circuit.

9.2 Notice

9.2.1 Please return one of this specification after your signature of acceptance.

9.2.2 When something gets doubtful with this specification, we shall jointly work to get an agreement.