



Serial No. : 2016-0978

DATE : 2016/11/04

ZTE CORPORATION

ITEM :

MONOLITHIC CRYSTAL FILTER

TYPE : _____ DSF753SDF

NOMINAL FREQUENCY : _____ 73.350MHz

SPEC No. : _____ 1D73312GQ22

Please acknowledge receipt of this specification by signing and returning a copy to us.

RECEIPT	
DATE	
RECEIVED	(signature)
	(name)

General Manufacturer of Quartz Devices

DAISHINKU CORP.

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C.ENG. *K. Kawano*

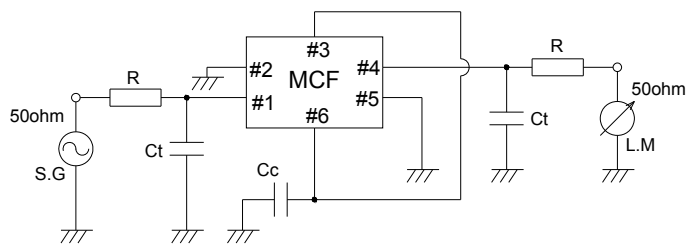
ENG. *A. Matsumoto*

1.Model	1D73312GQ22
2.Parts number(user)	
3.Type	DSF753SDF(4pole)
4.Electrical performances	
(1)Nominal frequency	73.350 MHz(Fundamental)
(2)Pass bandwidth	±6.00 kHz min./3dB(at 25°C)
(3)Stop bandwidth	±12.50 kHz max./18dB(at 25°C) ±25.00 kHz max./40dB
(4)Ripple	1.5 dB max. (at 25°C) 2.0 dB max. (at -20~+70°C)
(5)Insertion loss	5.0 dB max./Minimum loss(at 25°C)
(6)Guaranteed attenuation	65 dB min./f0+350~+1000kHz 80 dB min./f0-350~-1000kHz 85 dB min./f0±4.5MHz
(7)Group Delay	60 μs max./f0±6.0kHz
(8)Intermodulation	-120 dBm max./input level=-30dBm、 f0±25kHz & ±50kHz
(9)Maximum inputlevel	-10 dBm
(10)Terminating impedance	380 Ω±10% 5.0 pF±0.5pF
(11)Insulation resistance	500 MΩ min./DC100V(case-in/out)

5. Temperature range

(1)Operating temperature range	-20~+70 °C
(2)Storage temperature range	-30~+85 °C

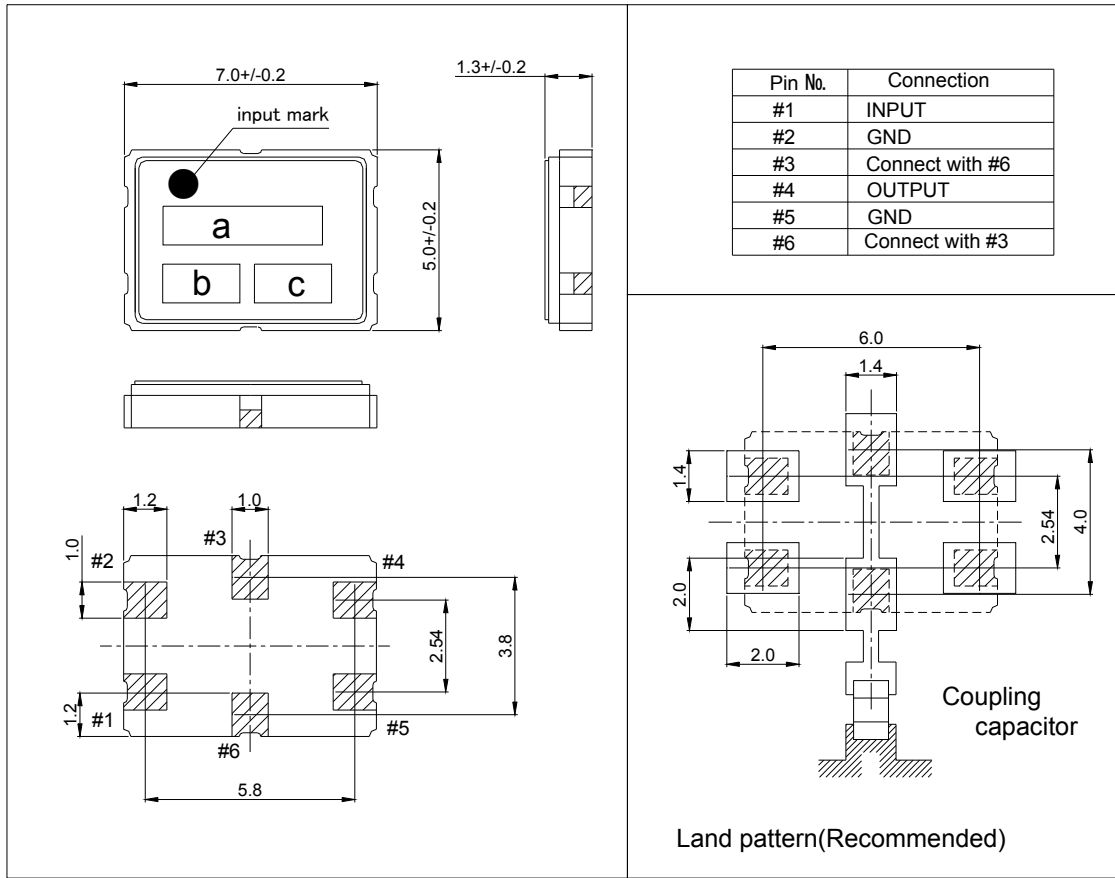
6. Test circuit



R=330 Ω
Ct=5.0 pF(floating capacity included)
Cc=11.0 pF(floating capacity included)

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7. Dimensions Unit:mm



8. Marking

- (a) Model 73312GQ22
- (b) Logo KDS
- (c) Manufactured year(*1)month

(*1)year: The last digit of the year of the Christian Era should be Corresponded to the Arabic figures.

Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
A	B	C	D	E	F	G	H	J	K	L	M

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9.Mechanical characteristics

9.1 Shock

After dropping 3 times from the height of 50cm onto hard wooden board of thickness more than 30mm,electrical characteristics shall be satisfied.

9.2 Vibration

After supplying the following vibration,electrical characteristics shall be satisfied.

- 1)Vibration frequency : 10~55Hz
- 2)Cycle : 1~2min.
- 3)Full wave : 1.5mm
- 4)Direction : X,Y,Z
- 5)Time : 2h/XYZ each direction XYZ

9.3 Solderability

Terminals/lead-wire of specimen shall be dipped into solder melted tank at +245±5°C for 2±0.5s. After applying rosin flux, soldering portion shall be covered in over 3/4 of terminals/lead-wires dipped.

10.Environmental characteristics

Provided that measurement shall be carried out after letting it alone in the room temperature for 1h.

10.1 Storage in low temperature

After letting it alone at -30±2°C for 240±4h, electrical characteristics shall be satisfied.

10.2 Storage in high temperature

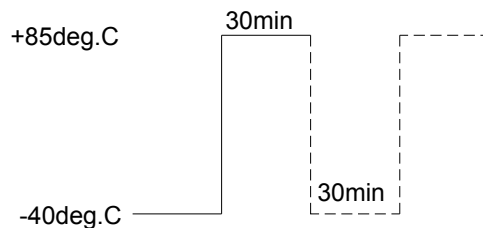
After letting it alone at +85±2°C for 240±4h, electrical characteristics shall be satisfied.

10.3 Humidity

After letting it alone at +40±2°C in humidity of 90 ~ 95% for 240±4h,electrical characteristics shall be satisfied.

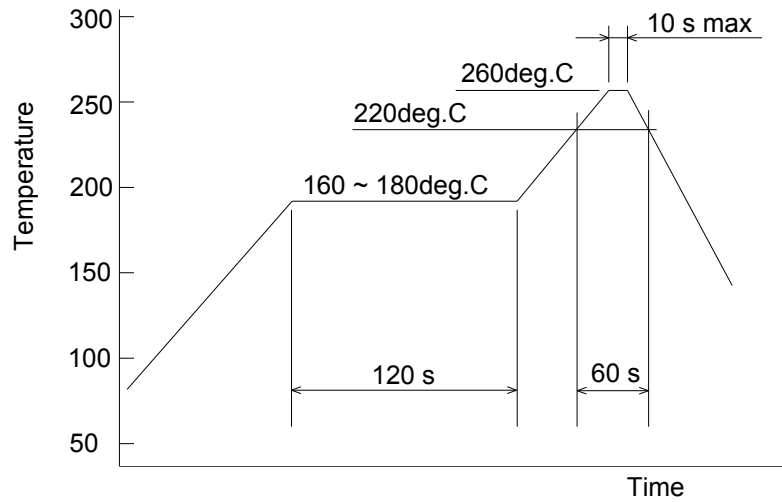
10.4 Temperature cycle

After supplying the following temperature 10 cycle, electrical characteristics shall be satisfied.



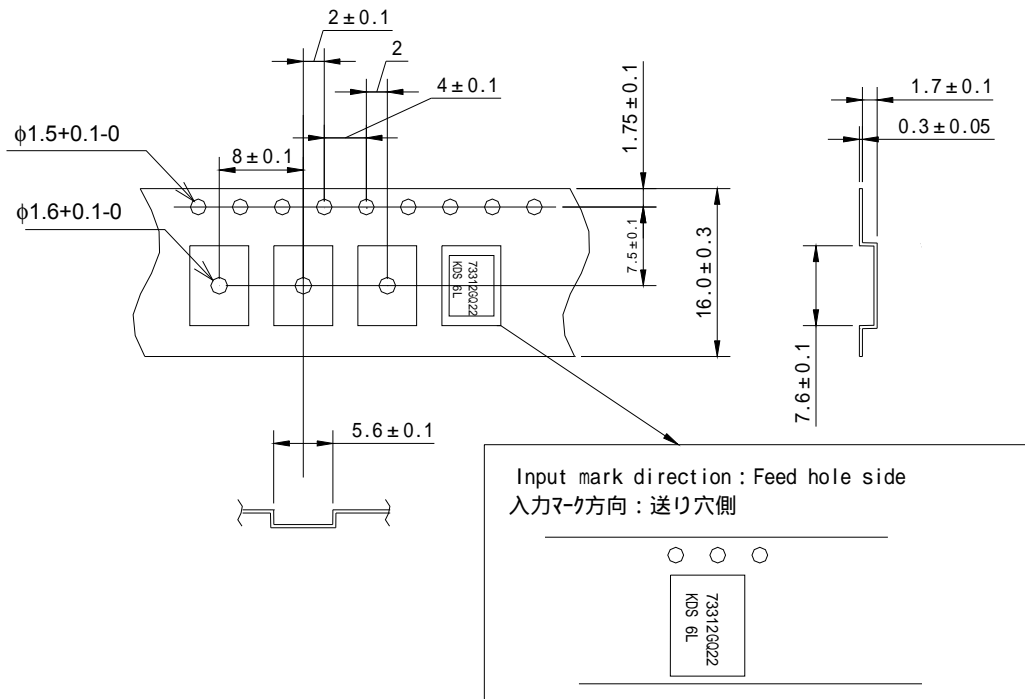
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11.Reflow condition

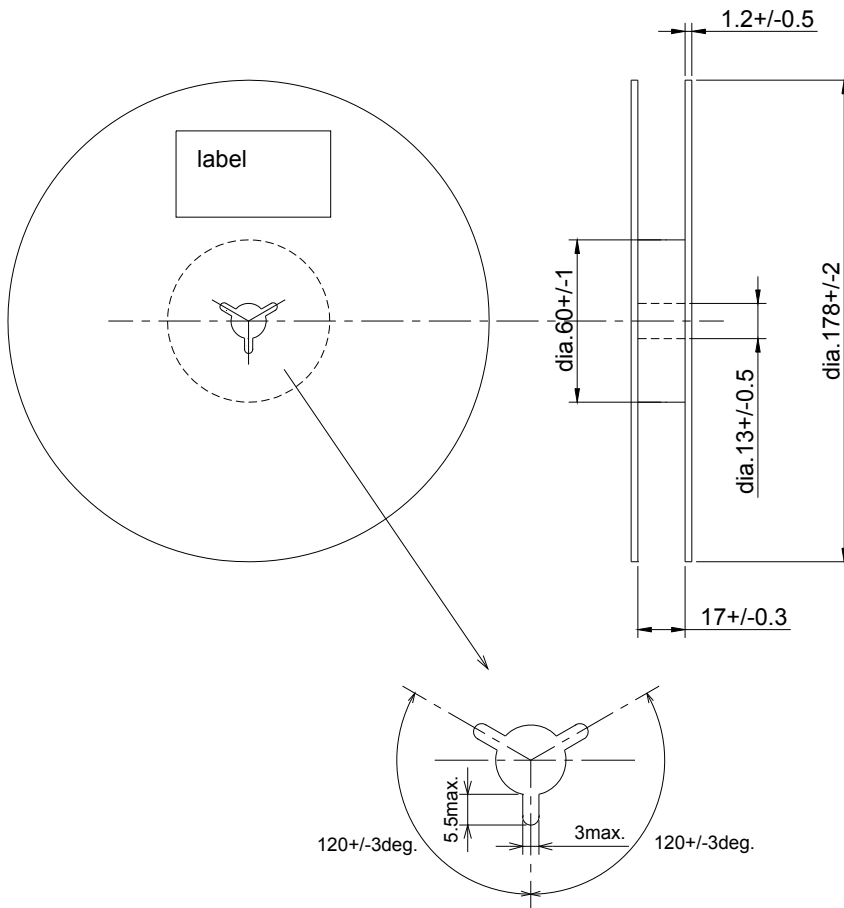
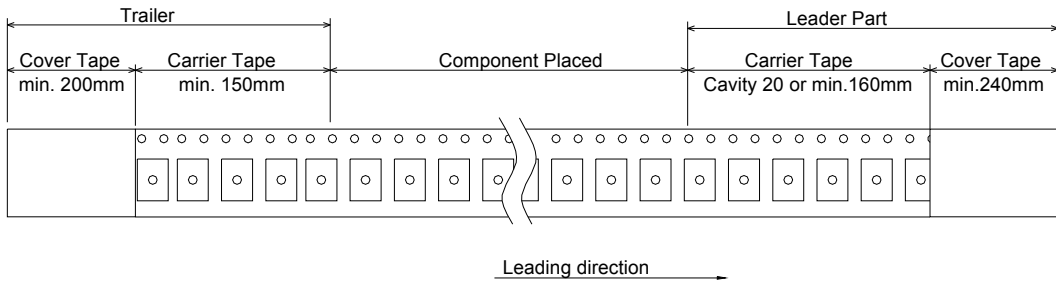


12.Emboss carrier tape & reel

12.1 Dimensions unit:mm



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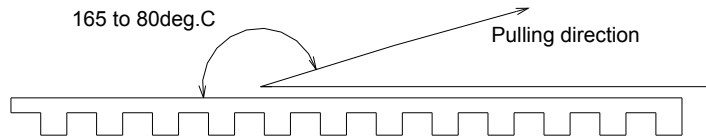
12.2 Material of the tape

Tape	Material
Carrier tape	A-PET
Cover tape	Polyester

12.3 Standard packing quantity
1,000 pcs./reel

12.4 Release strength of cover tape

Release strength : 0.1~0.7N
 Pulling direction : 165~180°
 Speed : 300mm/min.

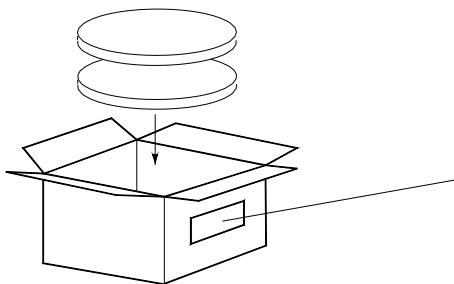


12.5 Label contents

- Type
- Our specification No.
- Your part No.
- Lot No.
- Nominal frequency
- Quantity

13.Outer carton

Outer carton size would be changed depending on lot size.
 The air cushion shall be placed at both bottom and top in outer carton.
 The description label shall be put on outer carton.



Item		Lot No.	
Spec		Q'ty	pcs.
Delivery Date		Notes	

description labe

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14.Handling instructions

- 14.1 About use of the washing liquid of a basin system, an alcoholic system, and a chlorofluorocarbon-replacing material system, it is checking that it is satisfactory. However please consult in advance about other washing liquid. Although the check about ultrasonic washing is performed, since it is an examination with a simple substance, the check for the second time by the use state is recommended.
- 14.2 DSF series has sufficient intensity to fall and vibration. However when too much shock is added according to a certain cause, the use after a characteristic check is recommended.
- 14.3 Crystal products are designed to be compatible with automatic mounting. Be sure to have mounting test in advance by using the actual mounting machine and check that the characteristics of the products are not damaged by the automatic mounting. In the process where the board is warped, such as board separation process, be careful that the warping does not influence the characteristics and soldering of crystal products. Since mounting by ultrasonic welding and processing have a possibility of an excessive vibration spreading inside a monolithic crystal filter and becoming the cause of characteristic deterioration and not oscillating, it does not recommend.
- 14.4 Since the soldering nature of a terminal may be degraded, please avoid storage in high temperature and a humid place. Please keep it in the place which direct rays do not hit and dew condensation does not generate.

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