## SHOULDER

规格书编号

**SPEC NO :** 

# 产品规格书 SPECIFICATION

CUSTOMER 客户:			
PRODUCT 产品:		CRYSTAL FILTER	
MODEL NO 型号:	MCF14DIP-21M15D-E		
PREPARED 编 制:	LEO	CHECKED 审核: YORK	
APPROVED 批准:	LIUMING	DATE日期: 2012-11-23	

客户确认 CUSTOMER RE	CEIVED:	
审核 CHECKED	批准 APPROVED	日期 DATE

## 无锡市好达电子有限公司

## SPECIFICATION SHEET

#### □ APPLICATION

This Standard Will Apply to The Quartz Crystals.

#### □ ELECTRICAL DATA

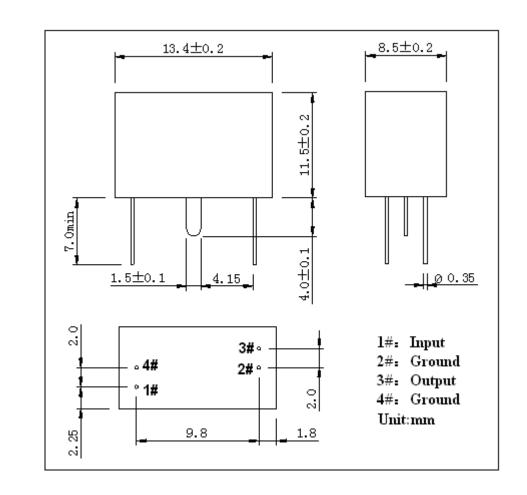
NO	Speciality	Parameter		
01	Holder type	21M15D		
02	Mode of Oscillations	Fundamental		
03	Center Frequency	21.4MHz		
04	Pass bandwidth	±7.5KHz min (at 3.0dB)		
05	Pass band ripple	2.0dB max		
06	Insertion loss	3.5dB max		
07	Stop Band width	±25KHz max (at 80dB)		
08	Terminating impedance	<b>1.6</b> ΚΩ//1.5pf		
09	Operating Tem. Range	-40~+85°C		
10	Insulated Resistance	500MΩ(max)(DC100V)		
11	Aging per Year	±3ppm		
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## SPECIFICATION SHEET

1. Marking :				
	SDE			
	21M15D			
	211113D			
2.Shock Test :	Dropping from 50 cm height,3 times on 30mm-thick- hard wood,			
	After testing, the electrical data follows the requirement.			
3. Vibration Test:	30 minutes in each direction 10 to 55 Hz, amplitude 0.75mm,			
5. violation rest .	After testing, the electrical data follows the requirement.			
4.Terminal strength :	Tensile: Fix main body of crystal. Load 0.9kg pulling force along,			
	teminal axial for 30±5 seconds. The terminal can not he pulled out or broken.			
	Bending: Hang 450g object on lead terminal. Bend 90 degree for			
	2 to 3 seconds. Return to the former place with the same speed			
	and then do it again oppositely. The down-lead does not become			
	broken and loosed.			
5.Sealing :	The crystal unit shall be immersed in alcohol for 5 minutes with 5kg			
J.Seamig .	pressure per cm2 .Taking out, Testing the resistance between down-			
	lead and fundamental. The resistance shall be at least $500M\Omega(max)$			
	(DC100V).			
	2~3 min			
6.Temperature cycle :	$2 \sim 3$ mm -40°C to +85°C			
	30min 30min			
	After cycling three times, there is no distinct damage on the surface.			
	Capacity testing requirement as vibration.			

## SPECIFICATION SHEET

7.Solderability :	The lead(2to2.5mm from terminal to bottom) is immersed in a	
7.50 defuelinty .	$230\pm5^{\circ}$ C Solder bath within 2±0.5 seconds.	
	The dipping surface of the lead shall be at least 95% covered with a	
	Continuous new solder coating.	
	Capacity testing requirement as vibration.	
8. Resistance to	The(2 to 2.5mm from terminal to bottom) is immersed in a	
soldering heat :	$350\pm10^{\circ}$ C solder bath within $3.5\pm0.5$ seconds.	
e	After testing, without distinct damage on the surface.	
	Capacity testing requirement as vibration.	
9. Resistance to heat :	Resistance to the lowest temperature: Stored at $-40\pm3$ °C for 2	
	hours and then at normal temperature for 2 hours before testing.	
	Capacity testing requirement as vibration.	
	Resistance to the highest temperature: Stored at 85±2°C for 2	
	hours and then at normal temperature for 2 hours before testing.	
	Capacity testing requirement as vibration.	
10. Invariable humidity	Stored at 40±3°C and RH93%±2% for 48 hours and then at normal condition for 2 hours before testing. Without distinct damage to the surface.	
	Capacity testing requirement as vibration.	



Title	Dimensions(13.4*8.5*11.5)		Article	21M15D	Page 1 of 1
Date	2012-6-15	Size	mm	Spec.No.	21.4
Issued			Discussed		
Checked			Approved		