#### 规格书编号

#### **SPEC NO:**

# 产品规格书 SPECIFICATION

PRODUCT 产品:	CRYSTAL FILTER		
MODEL NO 型 号:	MCF11DIP-18.5M18C-E		
PREPARED 编 制:	LEO	CHECKED 审	核: YORK
APPROVED 批准:	LIUMING	D A T E 日	期: 2015-3-24
客户确认 CUSTOMER RECEIVED:			
审核 CHECKE	D 批准 APPROVED		日期 DATE
	1	l l	

CUSTOMER 客 户:\_\_\_\_\_

## 无锡市好达电子有限公司 Shoulder Electronics Limited

# 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

#### SPECIFICATION SHEET

<ul> <li>□ APPLICATION</li> <li>This Standard Will Apply to The Quartz Crystals.</li> <li>□ ELECTRICAL DATA</li> </ul>				
NO	Speciality Parameter			
01	Holder type	MCF11DIP 6POLES		
02	Mode of Oscillations	Fundamental		
03	Center Frequency	18.500MHz		
04	Pass bandwidth	±9KHz min (at 3dB)		
05	Pass band ripple	2.0dB		
06	Insertion loss	3.0dB		
07	Stop Band width	±25KHz max (at 60dB)		
08	Terminating impedance	3000 Ω //2.0pf		
09	Operating Tem. Range	-40~+85°C		
10	Insulated Resistance	500M Ω (max)(DC100V)		
11	Aging per Year	±3ppm		

# **SPECIFICATION SHEET**

#### ☐ MECHANICAL DATA

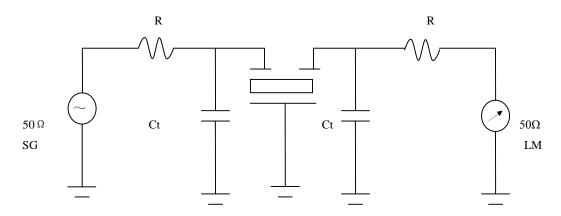
1. Marking:		
	SDE	
	18.5M18C-E	
2.Shock Test:	Dropping from 50 cm height,3 times on 30mm-thick- hard wood, After testing, the electrical data follows the requirement.	
3. Vibration Test:	30 minutes in each direction 10 to 55 Hz, amplitude 0.75mm, After testing, the electrical data follows the requirement.	
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 pressure per cm2 . Taking out, Testing the resistance between downlead and fundamental. The resistance shall be at least 500M $\Omega$ (max) (DC100V).	
6.Temperature cycle:	2~3 min -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

#### ☐ MECHANICAL DATA

7.Solderability:	The lead(2to2.5mm from terminal to bottom) is immersed in a $230\pm5^{\circ}\mathbb{C}$ Solder bath within $2\pm0.5$ 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 soldering heat:	The(2 to 2.5mm from terminal to bottom) is immersed in a $350\pm10^{\circ}\text{C}$ solder bath within $3.5\pm0.5$ seconds.  After testing, without distinct damage on the surface.  Capacity testing requirement as vibration.
9. Resistance to heat:	Resistance to the lowest temperature: Stored at $-40\pm3^{\circ}$ 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 $85\pm2^{\circ}$ C for 2 hours and then at normal temperature for 2 hours before testing. Capacity testing requirement as vibration.
10. Invariable humidity:	Stored at $40\pm3^{\circ}$ C and RH93% $\pm2\%$ for 48 hours and then at normal condition for 2 hours before testing. Without distinct damage to the surface. Capacity testing requirement as vibration.

## Test Circuit



R:  $2950Ω(\pm 10\%)$ , Ct:  $2.0pf(\pm 10\%)$ .

