

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:	UM-5-21M20B		
PREPARED 编 制:	LEO	CHECKED 审 核:	YORK
APPROVED 批 准:	LIUMING	D A T E 日 期:	2014-2-18

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

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

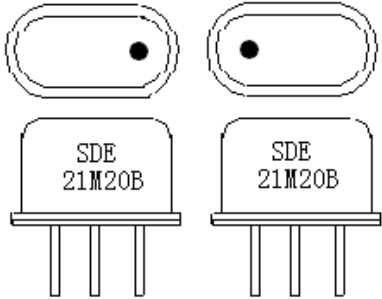
☐ APPLICATION

This Standard Will Apply to The Quartz Crystals.

☐ ELECTRICAL DATA

NO	Speciality	Parameter
01	Holder type	MCF UM-5*2
02	Mode of Oscillations	Fundamental
03	Center Frequency	21.4MHz
04	Pass bandwidth	$\pm 10\text{KHz}$ min (at 3dB)
05	Pass band ripple	1.0dB max
06	Insertion loss	2.5dB max
07	Stop Band width	$\pm 40\text{KHz}$ max (at 40dB)
08	Terminating impedance	$2000\ \Omega$ //2.0pf//6.0pf
09	Operating Tem. Range	-20~+70℃
10	Insulated Resistance	$500\text{M}\ \Omega$ (max)(DC100V)
11	Aging per Year	$\pm 3\text{ppm}$

□ MECHANICAL DATA

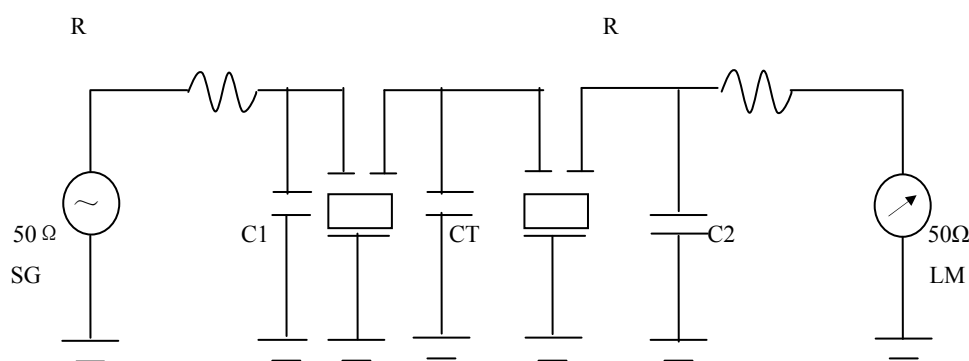
1. Marking:	
2.Shock Test:	Dropping from 50 cm height,3 times on 30mm-thick- hard wood, After testing, the electrical data follows the requirement.
3.Vibration Test:	30 minutes in each direction 10 to 55 Hz, amplitude 0.75mm, After testing, the electrical data follows the requirement.
4.Terminal strength:	<p>Tensile: Fix main body of crystal. Load 0.9kg pulling force along, teminal axial for 30±5 seconds.</p> <p>The terminal can not he pulled out or broken.</p> <p>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.</p>
5.Sealing:	The crystal unit shall be immersed in alcohol for 5 minutes with 5kg pressure per cm2 .Taking out, Testing the resistance between down-lead and fundamental. The resistance shall be at least 500M Ω (max) (DC100V).
6.Temperature cycle:	<p>2~3 min</p> <p>-20℃ to +70℃</p> <p>30min 30min</p> <p>After cycling three times, there is no distinct damage on the surface.</p> <p>Capacity testing requirement as vibration.</p>

SPECIFICATION SHEET

□ MECHANICAL DATA

7.Solderability:	The lead(2to2.5mm from terminal to bottom) is immersed in a $230 \pm 5^{\circ}\text{C}$ 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 soldering heat:	The(2 to 2.5mm from terminal to bottom) is immersed in a $350 \pm 10^{\circ}\text{C}$ solder bath within 3.5 ± 0.5 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 $-25 \pm 3^{\circ}\text{C}$ 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 $70 \pm 2^{\circ}\text{C}$ for 2 hours and then at normal temperature for 2 hours before testing. Capacity testing requirement as vibration.
10. Invariable humidity:	Stored at $40 \pm 3^{\circ}\text{C}$ and $\text{RH}93\% \pm 2\%$ for 48 hours and then at normal condition for 2 hours before testing. Without distinct damage to the surface. Capacity testing requirement as vibration.

Test Circuit



R: 1950Ω, C1,C2: 2.0pf, CT:6.0pf

