

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-21M20D-E _____

PREPARED 编制: _____ LEO _____ CHECKED 审核: _____ YORK _____

APPROVED 批准: _____ LIUMING _____ DATE 日期: _____ 2014-8-15 _____

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	MCF14DIP
02	Mode of Oscillations	Fundamental
03	Center Frequency	21.4MHz
04	Pass bandwidth	±10KHz min (at 3dB)
05	Pass band ripple	2.0dB
06	Insertion loss	4.0dB
07	Stop Band width	±40KHz max (at 90dB)
08	Terminating impedance	1800 Ω //2.0pf
09	Operating Tem. Range	-40~+85 °C
10	Insulated Resistance	500M Ω (max)(DC100V)
11	Aging per Year	±3ppm

SPECIFICATION SHEET

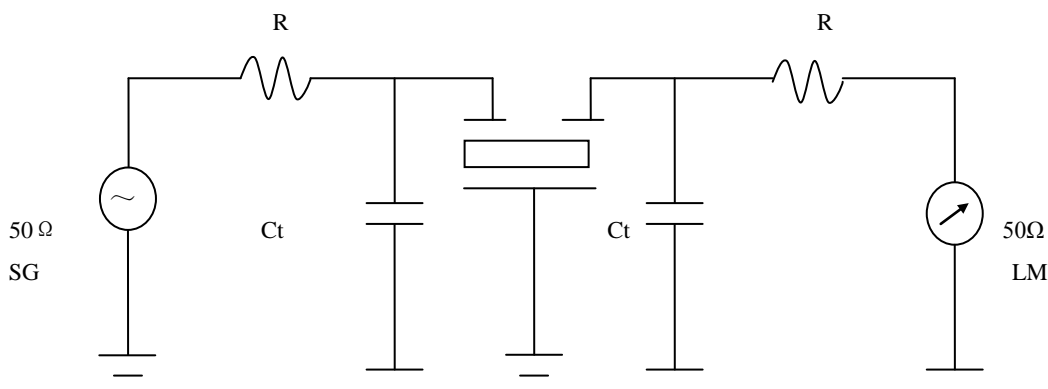
□ MECHANICAL DATA

1. Marking:	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p style="text-align: center;">SDE 21M20D-E</p> </div>
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. 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 -40℃ to +85℃ 30min 30min</p> <p>After cycling three times, there is no distinct damage on the surface. Capacity testing requirement as vibration.</p>

□ 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 $-40 \pm 3^{\circ}\text{C}$ 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 $85 \pm 2^{\circ}\text{C}$ 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 RH93% $\pm 2\%$ 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: $1750\Omega(\pm 10\%)$, Ct: $2.0\text{pf}(\pm 10\%)$ 。

