

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-21M12D _____
PREPARED 编制 : _____ LEO _____ CHECKED 审核 : _____ YORK _____
APPROVED 批准 : _____ LIUMING _____ DATE 日期 : _____ 2012-6-15 _____

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

SPECIFICATION SHEET

□ APPLICATION

This Standard Will Apply to The Quartz Crystals.

□ ELECTRICAL DATA

NO	Speciality	Parameter
01	Holder type	21M12D
02	Mode of Oscillations	Fundamental
03	Center Frequency	21.4MHz
04	Pass bandwidth	±6.0KHz min (at 3.0dB)
05	Pass band ripple	2.0dB max
06	Insertion loss	4.0dB max
07	Stop Band width	±22KHz max (at 80dB)
08	Terminating impedance	1.5KΩ//2pf
09	Operating Tem. Range	-20~+70°C
10	Insulated Resistance	500MΩ(max)(DC100V)
11	Aging per Year	±3ppm

SPECIFICATION SHEET

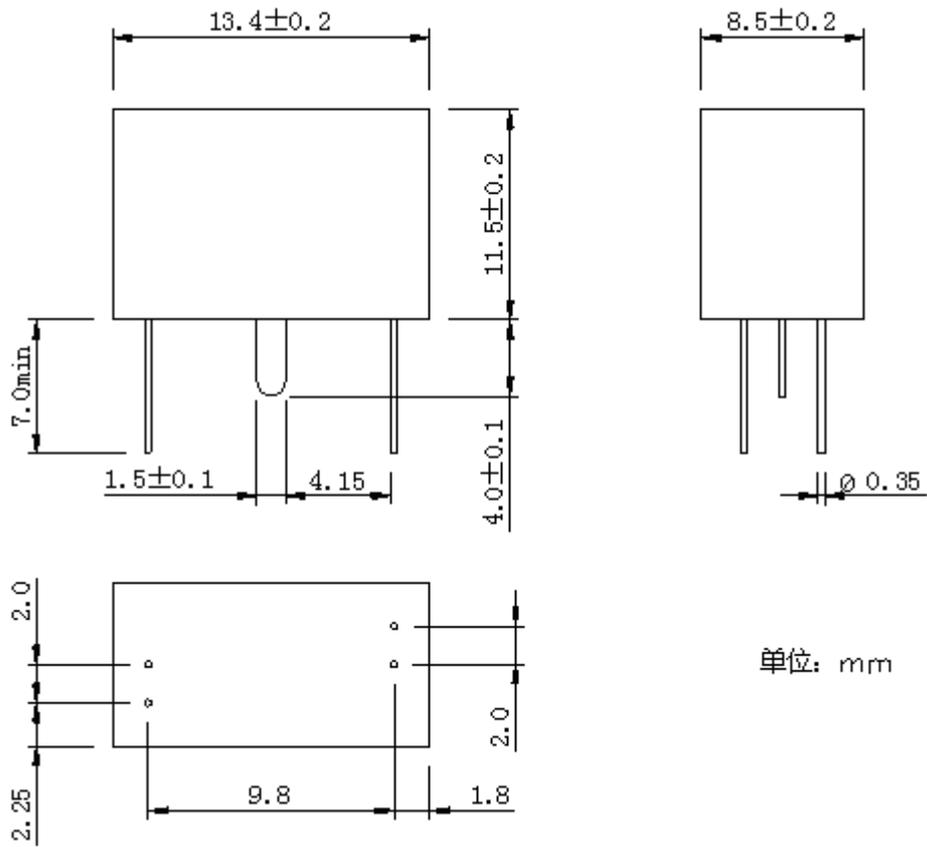
□ MECHANICAL DATA

1. Marking :	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>SDE 21M12D</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, terminal axial for 30±5 seconds. The terminal can not be 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 cm ² . Taking out, Testing the resistance between down-lead and fundamental. The resistance shall be at least 500MΩ(max) (DC100V).
6. Temperature cycle :	<p>2 ~ 3 min -20°C to +70°C 30min 30min</p> <p>After cycling three times, there is no distinct damage on the surface. Capacity testing requirement as vibration.</p>

SPECIFICATION SHEET

□ MECHANICAL DATA

7.Solderability :	<p>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.</p> <p>The dipping surface of the lead shall be at least 95% covered with a Continuous new solder coating.</p> <p>Capacity testing requirement as vibration.</p>
8. Resistance to soldering heat :	<p>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.</p> <p>After testing, without distinct damage on the surface.</p> <p>Capacity testing requirement as vibration.</p>
9. Resistance to heat :	<p>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.</p> <p>Capacity testing requirement as vibration.</p> <p>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.</p> <p>Capacity testing requirement as vibration.</p>
10. Invariable humidity :	<p>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.</p> <p>Capacity testing requirement as vibration.</p>



单位: mm

Title	Dimensions(13.4*8.5*11.5)		Article	21M12D	Page 1 of 1
Date	2012-6-15	Size	mm	Spec.No.	21.4
Issued			Discussed		
Checked			Approved		