

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-1-21M40B-E _____
PREPARED 编制: _____ LEO _____ CHECKED 审核: _____ YORK _____
APPROVED 批准: _____ LIUMING _____ DATE 日期: _____ 2014-8-4 _____

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	UM-1
02	Mode of Oscillations	Fundamental
03	Center Frequency	21.4MHz
04	Pass bandwidth	±20KHz min (at 3dB)
05	Pass band ripple	2.0dB
06	Insertion loss	3.0dB
07	Stop Band width	±55KHz max (at 40dB)
08	Terminating impedance	3000 Ω // -1.0pf // 3pf
09	Operating Tem. Range	-40~+85 °C
10	Insulated Resistance	500M Ω (max)(DC100V)
11	Aging per Year	±3ppm

SPECIFICATION SHEET

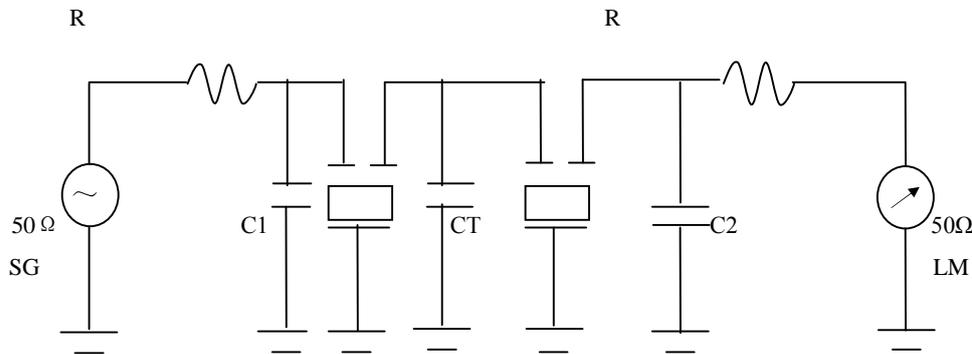
□ MECHANICAL DATA

1. Marking:	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p style="text-align: center;">SDE 21M40B-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>

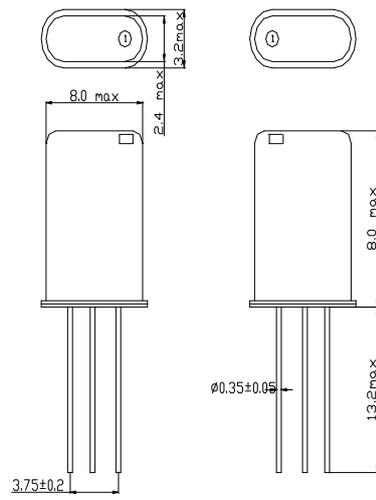
□ MECHANICAL DATA

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: 2950Ω, C1, C2: -1.0pf, CT: 3pf



MCF UM-1*2