

CRYSTAL FILTER

P/N:UM-5-F-45M7.5B

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	45.000MHz
04	Pass bandwidth	±3.75KHz min (at 3dB)
05	Pass band ripple	1.0dB max
06	Insertion loss	3.0dB max
07	Stop Band width	±12.5KHz max (at 30dB)
08	Terminating impedance	350 Ω //7.0pf//19pf
09	Operating Tem. Range	-20~+70°C
10	Insulated Resistance	500M Ω (max)(DC100V)
11	Aging per Year	±3ppm

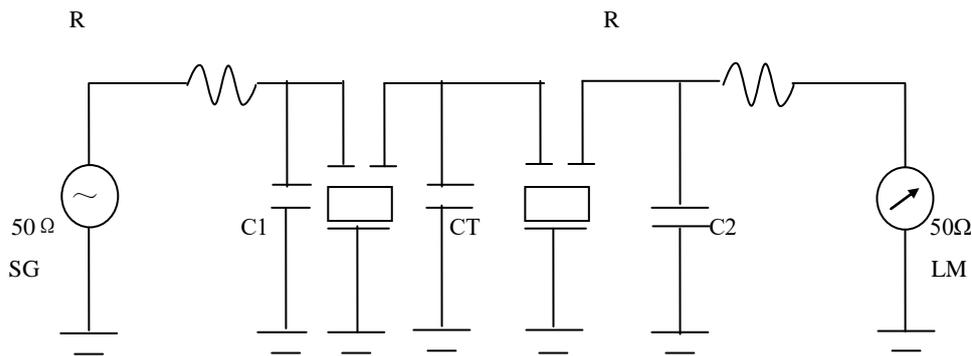
□ MECHANICAL DATA

<p>1. Marking:</p>	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p style="text-align: center;">SDE 45M7.5B</p> </div>
<p>2.Shock Test:</p>	<p>Dropping from 50 cm height,3 times on 30mm-thick- hard wood, After testing, the electrical data follows the requirement.</p>
<p>3.Vibration Test :</p>	<p>30 minutes in each direction 10 to 55 Hz, amplitude 0.75mm, After testing, the electrical data follows the requirement.</p>
<p>4.Terminal strength:</p>	<p>Tensile: Fix main body of crystal. Load 0.9kg pulling force along, terminal 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.</p>
<p>5.Sealing :</p>	<p>The crystal unit shall be immersed in alcohol for 5 minutes with 5kg pressure per cm<sup>2</sup> .Taking out, Testing the resistance between down- lead and fundamental. The resistance shall be at least 500MΩ(max) (DC100V).</p>
<p>6.Temperature cycle :</p>	<p><b>2 ~ 3 min</b> -30°C to +70°C 30min 30min 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 $2 \pm 0.5$ 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 $3.5 \pm 0.5$ 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 $-27 \pm 3^{\circ}\text{C}$ 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 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:  $300\Omega$ , C1, C2: 7.0pf, CT:19pf

