

4x2.5 SMD Crystal

Part Number Guide

T-M-FF.FFFM-LC-FTFS-OT-ESR-TR-S

T (Type 型号): J=4x2.5 SMD 4pads

M (Mode of Operation 振荡模式): F-Fundamental T-Third Overtone, etc

F (Frequency 标称频率): Normal - 5 digits of Frequency, e.g. 12.000M

Special - All digits of Frequency, e.g. 13.225625M

LC (Load Capacitance 负载电容): 20-20pF 00-series, etc

FT (Frequency Tolerance 调整频差): 30±30 ppm, etc

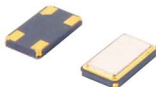
FS (Frequency Stability 温度频差): 50±50 ppm, etc

OT (Operating Temperature 工作温度): 1050-10°C to +60°C 4085-40°C to +85°C, etc

ESR (Equivalent Series Resistance 等效阻抗)

TR (Tape and Reel 编带)

S (Special Requirement 特殊要求)



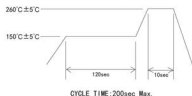
Electrical Specifications 电气参数

型号	Holder Type	4x2.5mm Ceramic Surface Mount
频率范围	Frequency Range	12.000MHz to 150.000MHz
调整频差	Frequency Tolerance (ΔF) (at 25°C)	$\pm 10\text{ppm}$ to $\pm 100\text{ppm}$
温度频差	Frequency Stability	$\pm 10\text{ppm}$ to $\pm 100\text{ppm}$
工作温度范围	Operating Temperature Range	-10°C ~ +60°C to -40°C ~ +85°C
储存温度范围	Storage Temperature Range	-40°C ~ +85°C / -55°C ~ +125°C
老化	Aging (25°C)	$\pm 5\text{ppm/year}$ Maximum
静电容	Shunt Capacitance (C0)	7pF Maximum
激励功率	Drive Level	10 μ W Typical
绝缘阻抗	Insulation Resistance (Ri)	500 Megohms Minimum at D.C.100V
负载电容	Load Capacitance (CL)	Suggested by customer

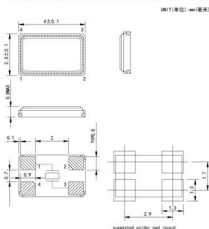
Equivalent Series Resistance and Mode of Operation 等效阻抗和振荡模式

Frequency Range 频率范围	ESR (Q) 等效阻抗	Mode 振荡模式
12.000~16.000MHz	80Max	Fundamental
16.000~20.000MHz	60Max	Fundamental
20.000~24.000MHz	50Max	Fundamental
$\geq 24.000\text{MHz}$	40Max	Fundamental

Reflow Condition 回流焊条件



Mechanical Dimensions 外型尺寸



Note: #2, #4 is connected with a cover. Please connect with a SW or a power supply.