



Quartz Crystal UM5S

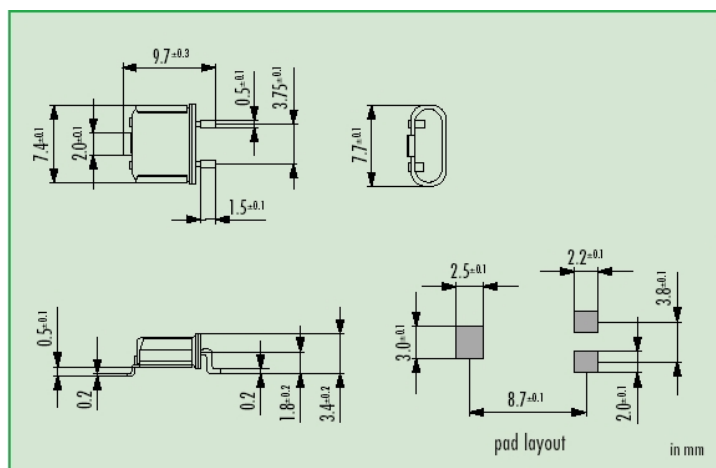
UM5 SMD Package Crystal · 9.7 x 7.7 mm

- Military Industry Standard Package
- wave soldering temperature: 260 °C max.
- package height 3.6 mm max.

General Data

TYPE	UM5S
frequency range	10.0 ~ 200.0 MHz
frequency tolerance	± 5 ppm ~ ± 100 ppm
load capacitance C_L	6 pF ~ 100 pF or series
shunt capacitance C_0	< 7 pF
storage temperature	-55 °C ~ +125 °C
drive level	0.01mW - 1mW
aging	< ±3 ppm first year

Dimensions



Operating Temp. Ranges	Frequency Stability						
	1 ±5 ppm	2 ±10 ppm	3 ±15 ppm	4 ±20 ppm	5 ±25 ppm	6 ±50 ppm	7 ±100 ppm
A 0 to 50°C	Y	Y	Y	Y	Y	Y	Y
B -10 to 60°C	Y	Y	Y	Y	Y	Y	Y
C -20 to 70°C	Y	Y	Y	Y	Y	Y	Y
D -30 to 80°C	N	N	Y	Y	Y	Y	Y
E -40 to 85°C	N	N	N	Y	Y	Y	Y
F -55 to 105°C	N	N	N	N	Y	Y	Y
G -55 to 125°C	N	N	N	N	Y	Y	Y
Environmental And Mechanical							
Mechanical Shock	Per MIL-STD-202 ,Method 213 , Cond.E						
Thermal Shock	Per MIL-STD-883 ,Method 1011 ,Cond.A						
Vibration	Per MIL-STD-883 ,Method 2007 ,Cond.A						
Seal	Per MIL-STD-883, Method 1014, Cond. B						
Solderability	Per MIL-STD-883 ,Method 2003 ,Cond.A						

ESR (series resistance R_s)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
10.0 ~ 19.999	fund.- AT	60	40
20.0 ~ 50.000	fund.- AT	40	20
30.0 ~ 79.999	3rd OT - AT	100	70
80.0 ~ 105.00	3rd OT - AT	80	50
50.0 ~ 59.999	5th OT - AT	250	200
60.0 ~ 129.99	5th OT - AT	200	160
130.0 ~ 200.0	7th OT - AT	180	150

Part Numbering Guide

