



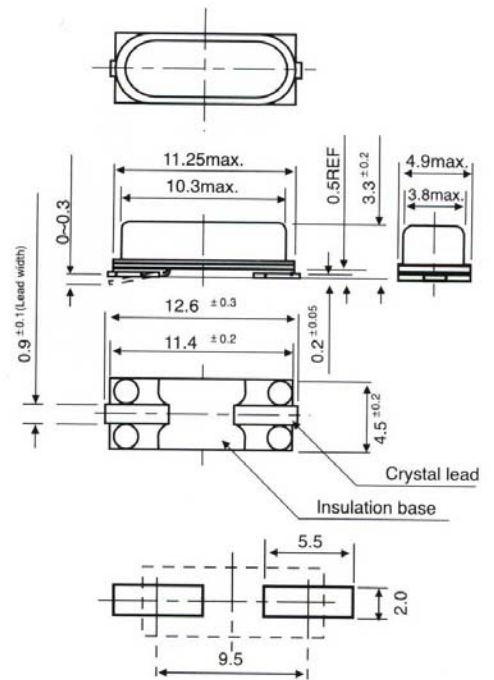
FEATURES:

- Low profile 4.1 (3.1) mm
- Resistance welded
- AT / BT- cut
- Low cost

Quartz Crystals
---Type: 49SM

SPECIFICATIONS:

Frequency Range	3.579545~64.0000MHz
Operating Mode	3.579545~40.0000 Fundamental
	24.576000~64.0000 3 rd Overtone
Operating Temp. Range	-10°C~+60°C (Standard)
Storage Temperature	-55°C~+85°C
Frequency Tolerance @ 25°C	±50ppm (Standard)
Frequency Stability Over Temp.	±50ppm (Standard)
Shunt Capacitance	7pF
Load Capacitance	10~47pF, Series (30pF Standard)
Drive Level	0.05mW~0.5mW (0.1mW Standard)
Aging @ 25°C	±5 ppm/year



ESR CHART (max):

Frequency Range (MHz)	ESR (Ω)	Frequency Range (MHz)	ESR (Ω)
3.579545~3.999999	180Ω	9.000000~14.999999	50Ω
4.000000~4.499999	130Ω	15.000000~18.999999	40Ω
4.500000~5.499999	120Ω	19.000000~40.000000	30Ω
5.500000~6.499999	80Ω	24.576000~35.000000	130Ω(3 rd)
6.500000~8.999999	70Ω	35.000000~64.000000	100Ω(3 rd)

Temperature Range and Stability

	±10ppm	±15 ppm	±20 ppm	±30 ppm	±50 ppm
A0= 0~+50	○	○	○	○	○
A1= -10~+60	○	○	○	○	○
A2= -20~+70	—	○	○	○	○
A3= -30~+75	—	—	—	○	○
A4= -40~+85	—	—	—	○	○
A5= -55~+85	—	—	—	—	○

Height Option	
49SM1	4.1 mm max
49SM2	3.1 mm max

ORDER OPTIONS:

Type	Freq. (MHz)	Load Cap. (pF)	Freq. Tolerance (ppm)	Freq. Stability (ppm)	Operating Temp. (°C)	Operating Mode	Package
49SM1	3.579545	C10~47 S=Series	±10	±10	A0= 0~+50	F = Fundamental 3R = 3 rd Overtone	T= tape&reel
49SM2	~ 64.00000		±15	±15	A1= -10~+60		
			±20	±20	A2= -20~+70		
			±30	±30	A3= -30~+75		
			±50	±50	A4= -40~+85		
					A5= -55~+85		

i.e. : 49SM1-24.000C18-30/30-A1-F