

## HC-49/SM Series 3.2 to 66MHz



This part is a miniature strip crystal units with a SMD low profile package.

### FEATURES

- Low Cost
- Industry Standard
- Wide Frequency Range
- Excellent Aging

### Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Units
Frequency Range	$F_0$		3.200		66.000	MHz
Frequency Tolerance	$\Delta F/F_0$	at 25°C	±10	±30	±50	PPM
Temperature Stability	$T_C$	Ref to 25°C	±5	±30	±50	PPM
Operating Temperature Range	$T_{OPR}$		-55	-20 to +70	+125	°C
Storage Temperature Range	$T_{STG}$		-55	-40 to +85	+125	°C
Shunt Capacitance	$C_0$				7	pF
Load Capacitance	$C_L$	Customer Specified	10	20	Series	pF
Insulator Resistance	$I_R$	100 V <sub>DC</sub>	500			MΩ
Drive Level	DL		1	100	500	μW
Aging	$F_a$	at 25°C, per year	-5.0		+5.0	PPM
Packing Unit			1000 pcs/reel			

### Equivalent Series Resistance (ESR) and Mode of Vibration (Mode)

Frequency Range(MHz)	Max ESR (Ω)	Mode	Frequency Range(MHz)	Max ESR (Ω)	Mode
3.200 to 4.499	150	Fundamental	9.000 to 9.999	60	Fundamental
4.500 to 5.999	120	Fundamental	10.000 to 12.999	50	Fundamental
6.000 to 6.999	100	Fundamental	13.000 to 30.000	40	Fundamental
7.000 to 7.999	90	Fundamental	30.000 to 66.000	80	3 <sup>rd</sup> Overtone
8.000 to 8.999	80	Fundamental			

### Mechanical Dimensions – mm (inch)

