

Surface Mount Crystal

- SR1-13/HC-49 SLSM (11 x 4.6 x 4.1 mm)
- SR1-19/HC-49 SSSM (11 x 4.6 x 2.6 mm)



Electrical Specifications

SMD Crystal - CR1-13 / HC-49 SLSM & CR1-19 / HC-49 SSSM, HC-49S-SMD (slim 2 leads)		CR1-13 / HC-49 SLSM	CR1-19 / HC-49 SSSM
PARAMETER	CONDITION		
FREQUENCY RANGE	FUND	3.2 MHz to 40 MHz	6 MHz to 40 MHz
	3RD OVERTONE	25 MHz to 67 MHz	25 MHz to 67 MHz
DIMENSIONS		11 x 4.6 x 4.1 mm	11 x 4.6 x 2.6 mm
LOAD CAPACITANCE (CL)		6 TO 32 pF & SERIES	6 TO 32 pF & SERIES
STATIC CAPACITANCE (Co)		5 pF MAX	5 pF MAX
EQUIVALENT SERIES RESISTANCE (ESR)		SEE TABLE 1 BELOW	SEE TABLE 1 BELOW
MODE		SEE TABLE 1 BELOW	SEE TABLE 1 BELOW
DRIVE LEVEL		100 μW typ., 500 μW MAX	100 μW typ., 500 μW MAX
FREQ. TOLERANCE AT +25C	STANDARD	+/-30 PPM	+/-30 PPM
	OPTIONAL	+/-10 PPM to +/-100 PPM	+/-10 PPM to +/-100 PPM
STABILITY VS. TEMP.	STANDARD	+/-30 PPM	+/-30 PPM
	OPTIONAL	+/-10 PPM to +/-100 PPM	+/-10 PPM to +/-100 PPM
OPERATING TEMP. RANGE	STANDARD	-20°C to +70°C	-20°C to +70°C
	OPTIONAL	SEE TABLE 2 BELOW	SEE TABLE 2 BELOW
STORAGE TEMP. RANGE		-50°C to +125°C	-50°C to +125°C
AGING	FIRST YEAR	5 PPM	5 PPM
HERMETIC SEALED		YES, RESISTANCE WELD	YES, RESISTANCE WELD
INSULATION RESISTANCE		500 MΩ Min	500 MΩ Min
DLD TESTED	RLD, DLD, FLD	YES, 100%	YES, 100%
RoHS STATUS		FULLY COMPLIANT	FULLY COMPLIANT
LEGACY P/N		CR1-13	CR1-19

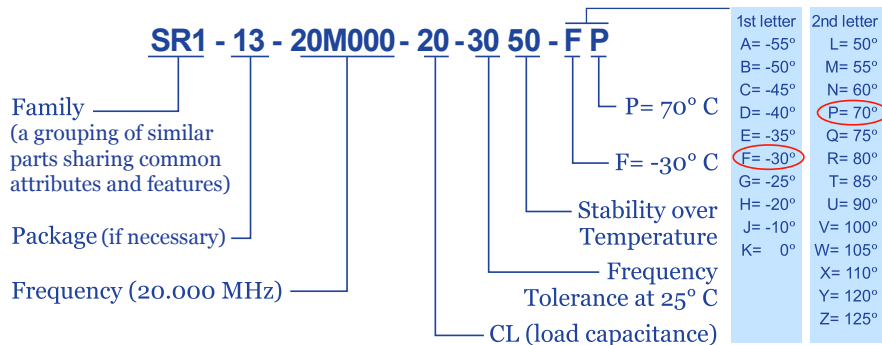
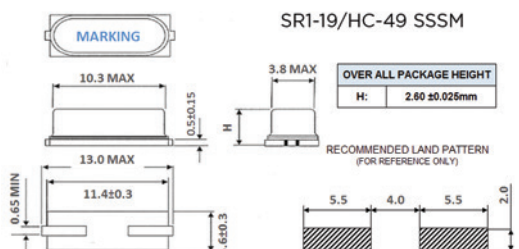
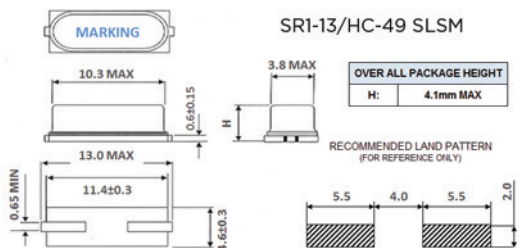
FREQUENCY RANGE	MAX ESR / MODE
3.200 to 3.4999 MHz	150 Ohms, FUND
3.500 to 3.999 MHz	120 Ohms, FUND
4.000 to 5.999 MHz	100 Ohms, FUND
6.000 to 6.999 MHz	70 Ohms, FUND
7.000 to 8.999 MHz	60 Ohms, FUND

FREQUENCY RANGE	MAX ESR / MODE
9.000 TO 9.999 MHz	50 Ohms, FUND
10.000 TO 12.999 MHz	40 Ohms, FUND
13.000 TO 19.999 MHz	30 Ohms, FUND
20.000 to 40.000 MHz	20 Ohms, FUND
25.000 to 67.000 MHz	80 Ohms, 3rd O.T.

POPULAR TEMPERATURE RANGES
-10°C / +60°C
-20°C / +70°C
-40°C / +85°C
OTHER TEMPERATURE RANGES AVAILABLE - CONSULT FACTORY

Dimensions (Unit:mm)

*NKG Crystal Part Example Key



*NOT TO SCALE

Contact
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