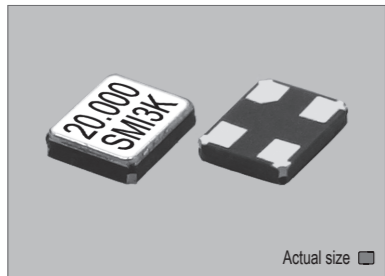
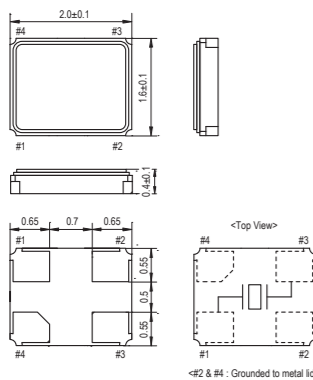


21SMX

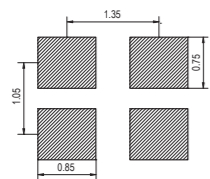


Actual size 0.00568 gm (wt.)

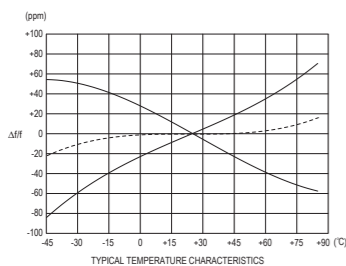
21SMX



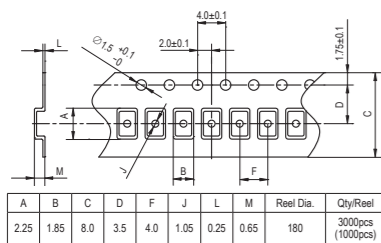
SOLDERING PATTERN



AT-CUT



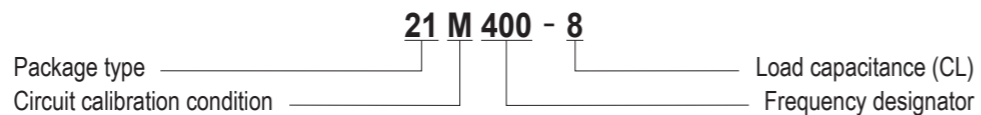
TAPE SPECIFICATIONS



STANDARD SPECIFICATIONS

Item	Specifications
Package type	21SMX
Frequency range	20.000 MHz to 80.000 MHz
Frequency tolerance	±30 ppm at +25°C ±3°C
Temperature stability (referred to +25°C)	±30 ppm over -20°C to +70°C
Load capacitance (CL)	8 pF, Typical
Shunt capacitance (C0)	5 pF max.
Drive level (P)	100 μW max. (10 μW for testing)
Aging	±5 ppm max. at +25°C ±3°C per year
Cut / Oscillation mode	AT-Cut / Fundamental
Reflow condition	10 seconds max. at +250°C ±10°C

PART NUMBERING GUIDE



Example

SMI Part No.	Package	Circuit Calibration Condition	Frequency
21M400-8	21 = 21SMX	M = Parallel resonance CL= 8 pF	400 = 40.000 MHz
21S270	21 = 21SMX	S = Series resonance	270 = 27.000 MHz

PACKAGE DATA

Item	Package	21SMX
Lid		Metal
Base		Ceramic
Sealing		Seam
Terminal		Tungsten (metalized)
Terminal plating		Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)

21SMX STANDARD FREQUENCIES

Frequency MHz	Frequency Designator	Max. Equivalent Series Resistance Ohms (Ω) ESR
20.000000	200	100
24.000000	240	80
25.000000	250	80
26.000000	260	60
27.000000	270	60
27.120000	271	60
28.636300	286	60
30.000000	300	60
32.000000	320	60
36.000000	360	60
38.400000	384	60
40.000000	400	50
42.000000	420	50
44.545000	44545	50
48.000000	480	50