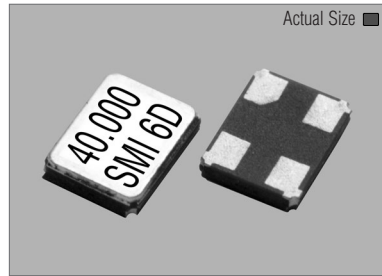
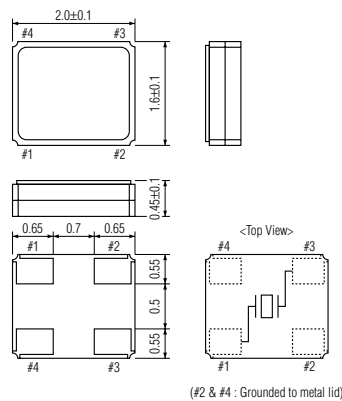


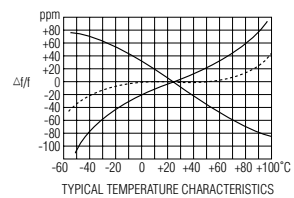
21SMX



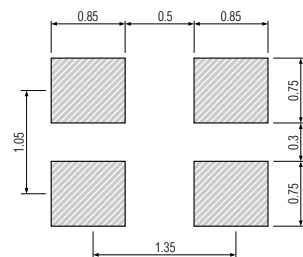
21SMX



AT-CUT



SOLDERING PATTERN



STANDARD SPECIFICATIONS

1. Package type ..... 21SMX
2. Frequency range ..... 20.000 MHz to 80.000 MHz
3. Frequency tolerance ..... ±50 ppm at +25°C ±3°C
4. Temperature stability (referred to +25°C) ..... ±50 ppm over -20°C to +70°C
5. Load capacitance (CL) ..... 8 pF, Typical
6. Shunt capacitance (Co) ..... 5 pF max.
7. Drive level (P) ..... 100 μW max. (10 μW for testing)
8. Aging ..... ± 5 ppm max. at +25°C ±3°C per year
9. Cut/Oscillation mode ..... AT-Cut/Fundamental
10. Reflow condition ..... 10 seconds max. at +250°C ±10°C

PART NUMBERING GUIDE



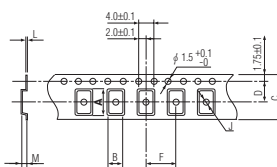
EXAMPLE

SMI PART NO.	Package	Circuit Calibration Condition	Frequency
<b>21M400-8</b>	21 = 21SMX	M = Parallel resonance CL = 8 pF	400 = 40.000 MHz
<b>21S270</b>	21 = 21SMX	S = Series resonance	270 = 27.000 MHz

PACKAGE DATA

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

TAPE SPECIFICATIONS



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
2.25	1.85	8.0	3.5	4.0	1.0	0.25	0.65	180	3000pcs

21SMX STANDARD FREQUENCIES

FREQUENCY MHz	FREQUENCY DESIGNATOR	MAX EQUIVALENT SERIES RESISTANCE OHMS(Ω) ESR
20.000000	200	120
20.480000	204	120
20.500000	205	120
24.000000	240	100
24.576000	245	100
26.000000	260	80
27.000000	270	80
27.120000	271	80
28.636360	2863	80
32.000000	320	80
32.768000	32768	80
36.000000	360	80
38.400000	384	60
40.000000	400	60