

XTAL

CLK OSC

VCXO

TCXO

OCXO

MCF

XTAL

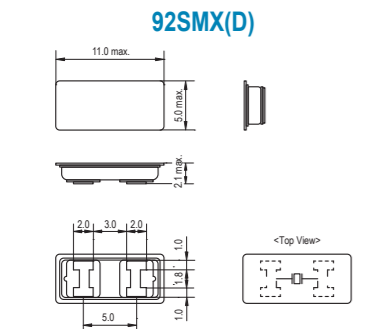
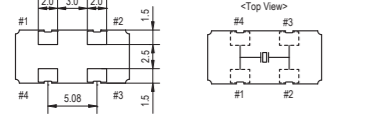
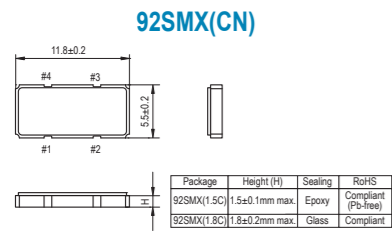
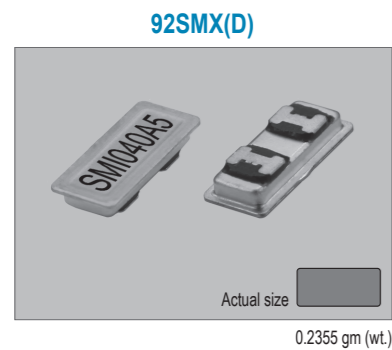
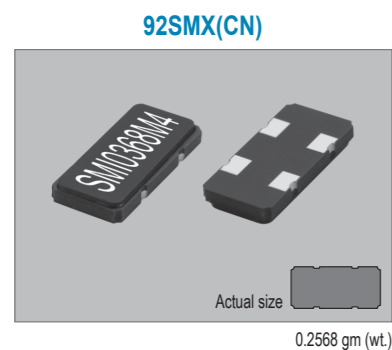
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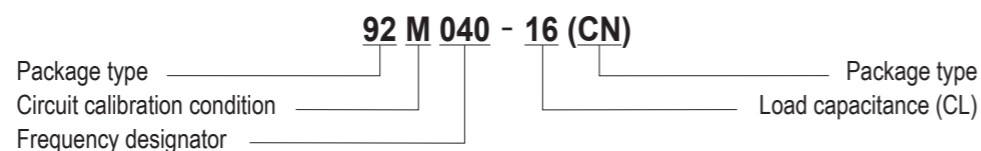


STANDARD SPECIFICATIONS

Item	Specifications	
	92SMX(CN)	92SMX(D)*
Package type	92SMX(CN)	92SMX(D)*
Frequency range	3.579545 MHz to 30.0 MHz	3.579545 MHz to 40.0 MHz
Frequency tolerance	±50 ppm at +25°C ±3°C	
Temperature stability (referred to +25°C)	±50 ppm over -20°C to +70°C	
Load capacitance (CL)	16 pF, Typical	
Shunt capacitance (C0)	5 pF max.	
Drive level (P)	300 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	

\*Formerly 49SMX-CB(N)

PART NUMBERING GUIDE



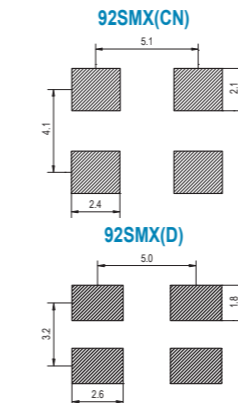
Example

SMI Part No.	Package	Circuit Calibration Condition	Frequency
92M040-16(CN)	92(CN) = 92SMX(CN)	M = Parallel resonance CL = 16pF	040 = 4.000 MHz
92M060-20(D)	92(D) = 92SMX(D)	M = Parallel resonance CL = 20pF	060 = 6.000 MHz

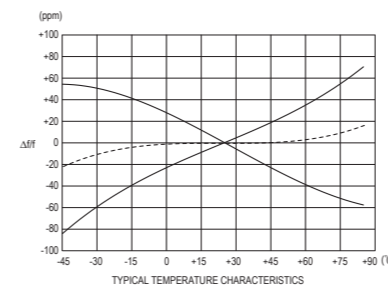
PACKAGE DATA

Item	Package	92SMX(CN)	92SMX(D)
Lid / Cover		Ceramic	Metal
Base		Ceramic	Glass on Metal
Insulator		n.a.	n.a.
Sealing		See drawing	Resistance
Terminal		Tungsten (metalized)	Alloy (FeNiCo)
Terminal plating		Gold / Nickel (surface) / (under)	Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)	Compliant (Pb-free)

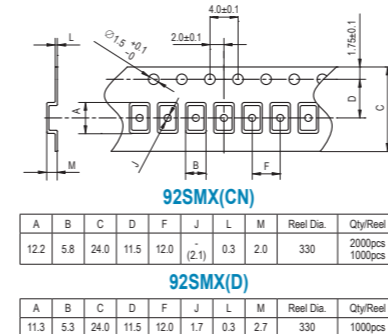
SOLDERING PATTERN



AT-CUT



TAPE SPECIFICATIONS



92SMX STANDARD FREQUENCIES

Frequency MHz	Frequency Designator	Max. Equivalent Series Resistance Ohms(Ω)ESR	Frequency MHz	Frequency Designator	Max. Equivalent Series Resistance Ohms(Ω)ESR
3.579545	035	200	24.000000	240	50
3.648000	0364	200	24.576000	245	50
3.686400	0368	200	25.000000	250	40
4.000000	040	150	26.540000	2654	40
4.032000	0403	150	27.000000	270	40
4.096000	0409	150	28.636363	2863	40
4.194304	041	150	29.491200	294	40
4.433619	044	150	30.000000	300	40
4.800000	048	150	32.000000	320	40
4.915200	049	150	33.000000	330	40
5.000000	050	150	35.468950	354	40
5.333000	05333	150	36.864000	368	40
5.699623	056	150	37.745000	377	40
6.000000	060	100	39.000000	390	40
6.144000	061	100	40.000000	400	40
6.176000	0617	100			
7.372800	073	100			
7.600000	076	100			
7.680000	0768	100			
8.000000	080	100			
8.192000	08192	100			
8.400000	084	100			
9.000000	090	100			
9.216000	092	100			
9.600000	096	100			
9.830400	098	100			
10.000000	100	80			
10.202000	102	80			
10.245000	10245	80			
11.059200	1105	80			
12.000000	120	80			
12.288000	122	80			
13.000000	130	80			
13.248000	132	80			
13.500000	135	80			
14.000000	140	50			
14.318180	143	50			
14.400000	144	50			
14.745600	147	50			
15.000000	150	50			
15.360000	153	50			
16.000000	160	50			
16.384000	163	50			
17.700000	177	50			
17.734475	1773	50			
18.000000	180	50			
18.432000	184	50			
19.660800	196	50			
20.000000	200	50			
20.480000	2048	50			
22.118400	221	50			
23.000000	230	50			