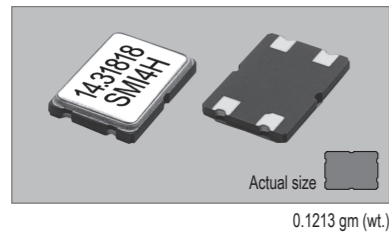


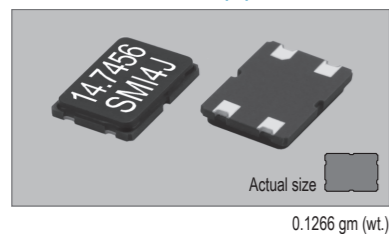
XTAL

94SMX(B)



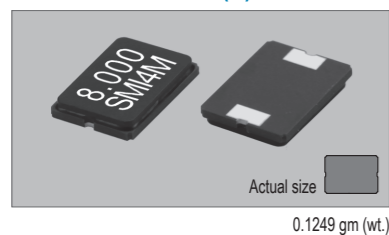
CLK OSC

94SMX(C)



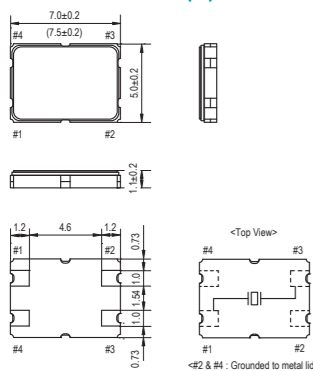
VCXO

94SMX(D)



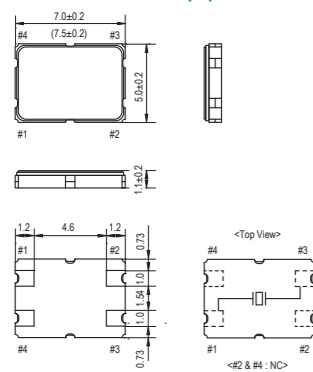
TCXO

94SMX(B)



OCXO

94SMX(C)



MCF

STANDARD SPECIFICATIONS

Item	Specifications		
	94SMX(B)	94SMX(C)	94SMX(D)
Package type	94SMX(B)	94SMX(C)	94SMX(D)
Frequency range	8.0 MHz to 100.0 MHz	6.0 MHz to 70.0 MHz	6.0 MHz to 70.0 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)	100 µW max. (10 µW for testing)		
Aging	±5 ppm max. at +25°C ±3°C per year		
Cut / Oscillation mode	AT-Cut / Fundamental / 6.000 MHz to 50.000 MHz		
	AT-Cut / 3rd overtone / 30.000 MHz to 100.000 MHz		
Reflow condition	10 seconds max. at +250°C ±10°C		

PART NUMBERING GUIDE

94 M 800 - 16 (D) 3OT



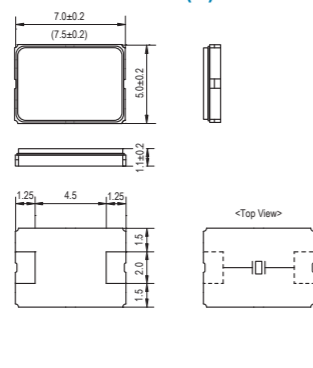
Example

SMI Part No.	Package	Circuit Calibration Condition	Frequency	Oscillation mode
94S945(B)3OT	94(B) = 94SMX(B)	S = Series resonance	945 = 94.500 MHz	3OT = 3rd Overtone
94M160-18(C)	94(C) = 94SMX(C)	M = Parallel resonance CL = 18 pF	160 = 16.000 MHz	Fundamental (No indication with P/N)
94M800-16(D)3OT	94(D) = 94SMX(D)	M = Parallel resonance CL = 16 pF	800 = 80.000 MHz	3OT = 3rd Overtone

PACKAGE DATA

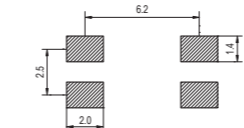
Item	Package	94SMX(B)	94SMX(C)	94SMX(D)
Lid		Metal	Ceramic	Ceramic
Base		Ceramic	Ceramic	Ceramic
Sealing		Seam	Epoxy	Epoxy
Terminal		Tungsten (metalized)	Tungsten (metalized)	Tungsten (metalized)
Terminal plating		Gold / Nickel (surface) / (under)	Gold / Nickel (surface) / (under)	Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)	Compliant (Pb-free)	Compliant (Pb-free)

94SMX(D)

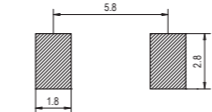


SOLDERING PATTERN

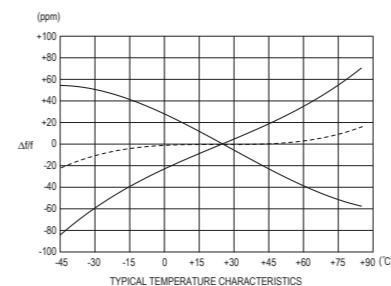
94SMX(B) & 94SMX(C)



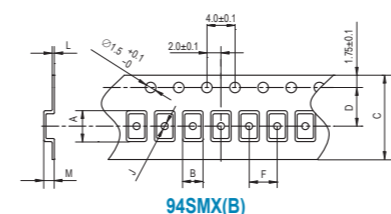
94SMX(D)



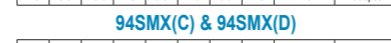
AT-CUT



TAPE SPECIFICATIONS



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
7.3	5.3	16.0	7.5	8.0	1.5	0.3	1.9	178	1000pcs



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
7.4	5.4	16.0	7.5	8.0	1.5	0.3	1.8	178	1000pcs

94SMX STANDARD FREQUENCIES

Frequency MHz	Frequency Designator	Max. Equivalent Series Resistance Ohms(Ω)ESR	Frequency MHz	Frequency Designator	Max. Equivalent Series Resistance Ohms(Ω)ESR
6.000000	060	80	40.000000	400	50
6.144000	061	80	45.555000	455	50
7.372800	073	80	49.152000	491	50
7.600000	076	80	56.448000	564	80 (3rd OT)
8.000000	080	80	56.500000	565	80 (3rd OT)
9.216000	092	80	57.645000	576	80 (3rd OT)
9.830400	098	80	61.440000	614	80 (3rd OT)
9.843750	0984	80	64.000000	640	80 (3rd OT)
10.000000	100	60	70.537600	705	80 (3rd OT)
10.245000	10245	60	72.303330	723	80 (3rd OT)
10.368000	103	60	72.837500	728	80 (3rd OT)
11.059200	1105	60	76.210000	762	80 (3rd OT)
12.000000	120	60	77.500000	775	80 (3rd OT)
12.288000	122	60	78.555000	7855	80 (3rd OT)
12.800000	128	60	78.587500	7858	80 (3rd OT)
13.000000	130	60	80.000000	800	80 (3rd OT)
13.500000	135	60	80.910000	809	80 (3rd OT)
13.560000	1356	60	81.840000	818	80 (3rd OT)
13.567200	135672	60	85.250000	852	80 (3rd OT)
13.824000	138	60	86.784000	867	80 (3rd OT)
14.318180	143	60	94.500000	945	80 (3rd OT)
14.725000	14725	60	100.000000	100.0	80 (3rd OT)
14.745600	147	60			
15.360000	153	60			
16.000000	160	50			
16.368000	16368	50			
16.384000	163	50			
16.670000	1667	50			
18.000000	180	50			
18.432000	184	50			
19.660800	196	50			
20.000000	200	50			
20.480000	2048	50			
20.945000	20945	50			
21.245000	2124	50			
23.421000	234	50			
23.670833	2367	50			
24.576000	245	50			
25.000000	250	50			
27.000000	270	50			
28.224000	282	50			
28.600000	286	50			
28.636363	2863	50			
29.498928	2949892	50			
30.000000	300	50			
31.914800	319	50			
33.333000	33333	50			
33.553000	335	50			
35.328000	353	50			
35.468950	354	50			
36.000000	360	50			
36.864000	368	50			
39.600000	396	50			

XTAL

CLK OSC

VCXO

TCXO

OCXO

MCF