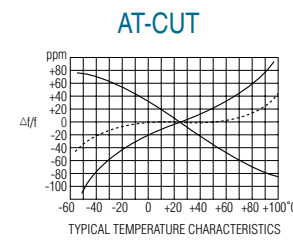
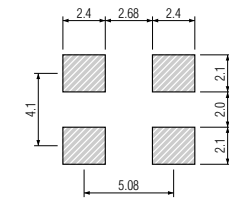


STANDARD SPECIFICATIONS

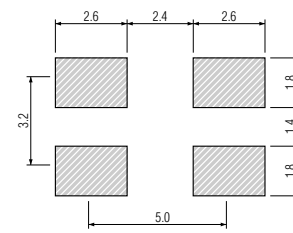
- Package type ..... 92SMX(CN), 92SMX(D)\*, 92SMX(E) & 92SMX(F)
- Frequency range ..... 92SMX(CN) : 3.579545 MHz to 30.000 MHz  
92SMX(D) : 3.579545 MHz to 40.000 MHz  
92SMX(E) : 3.579545 MHz to 40.000 MHz  
92SMX(F) : 3.579545 MHz to 40.000 MHz
- Frequency tolerance .....  $\pm 50$  ppm at  $+25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
- Temperature stability (referred to  $+25^{\circ}\text{C}$ ) .....  $\pm 50$  ppm over  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Load capacitance (CL) ..... 16 pF, Typical
- Shunt capacitance (Co) ..... 5 pF max.
- Drive level (P) ..... 100  $\mu\text{W}$  max. (10  $\mu\text{W}$  for testing)
- Aging .....  $\pm 5$  ppm max. at  $+25^{\circ}\text{C} \pm 3^{\circ}\text{C}$  per year
- Cut/Oscillation mode ..... AT-Cut/Fundamental
- Reflow condition ..... 10 seconds max. at  $+250^{\circ}\text{C} \pm 10^{\circ}\text{C}$



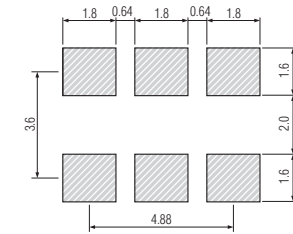
SOLDERING PATTERN for 92SMX(CN) & 92SMX(E)



SOLDERING PATTERN for 92SMX(D)



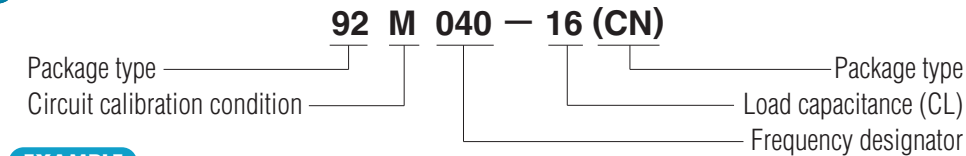
SOLDERING PATTERN for 92SMX(F)



92SMX STANDARD FREQUENCIES

FREQUENCY MHz	FREQUENCY DESIGNATOR	MAX EQUIVALENT SERIES RESISTANCE OHMS( $\Omega$ )	ESR	FREQUENCY MHz	FREQUENCY DESIGNATOR	MAX EQUIVALENT SERIES RESISTANCE OHMS( $\Omega$ )	ESR
3.579545	035	200		14.000000	140	50	
3.648000	0364	200		14.318180	143	50	
3.686400	0368	200		14.400000	144	50	
4.000000	040	150		14.745600	147	50	
4.032000	0403	150		15.000000	150	50	
4.096000	0409	150		15.360000	153	50	
4.194304	041	150		16.000000	160	50	
4.433619	044	150		16.384000	163	50	
4.800000	048	150		17.700000	177	50	
4.915200	049	150		17.734475	1773	50	
5.000000	050	150		18.000000	180	50	
5.333000	053	150		18.432000	184	50	
5.699623	056	150		19.660800	196	50	
6.000000	060	100		20.000000	200	50	
6.144000	061	100		20.480000	204	50	
6.176000	0617	100		22.118400	221	50	
7.372800	073	100		23.000000	230	50	
7.600000	076	100		24.000000	240	50	
7.680000	0768	100		24.576000	245	50	
8.000000	080	100		25.000000	250	40	
8.192000	081	100		26.540000	265	40	
8.400000	084	100		27.000000	270	40	
9.000000	090	100		28.636363	2863	40	
9.216000	092	100		29.491200	294	40	
9.600000	096	100		30.000000	300	40	
9.830400	098	100		32.000000	320	40	
10.000000	100	80		33.000000	330	40	
10.202000	102	80		35.468950	354	40	
10.245000	10245	80		36.864000	368	40	
11.059200	1105	80		37.745000	377	40	
12.000000	120	80		39.000000	390	40	
12.288000	122	80		40.000000	400	40	
13.000000	130	80					
13.248000	132	80					
13.500000	135	80					

PART NUMBERING GUIDE



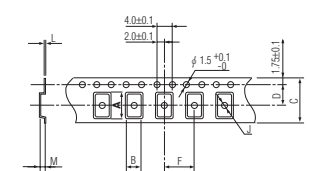
EXAMPLE

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 = 20 pF	060 = 6.000 MHz
92M035-14(E)	92(E) = 92SMX(E)	M = Parallel resonance CL = 14 pF	035 = 3.579545 MHz
92S143(F)	92(F) = 92SMX(F)	S = Series resonance	143 = 14.318180 MHz

PACKAGE DATA

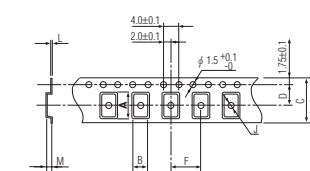
Item	Package	92SMX(CN)	92SMX(D)	92SMX(E)	92SMX(F)
Lid/Cover		Ceramic	Metal	Metal	Metal
Base		Ceramic	Glass on Metal	Metal	Metal
Insulator		n. a.	n. a.	46 nylon	46 nylon
Sealing		Epoxy	Resistance	Resistance	Resistance
Terminal		Tungsten (metalized)	Alloy (FeNiCo)	42 alloy	42 alloy
Terminal plating		Gold / Nickel (surface) / (under)	Gold / Nickel (surface) / (under)	Tin	Tin
RoHS		Compliant(Pb-free)	Compliant(Pb-free)	Compliant(Pb-free)	Compliant(Pb-free)

TAPE SPECIFICATIONS for 92SMX(CN)



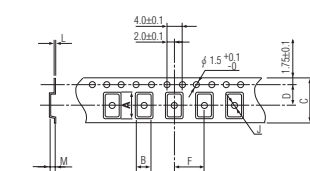
A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
12.2	5.8	24.0	11.5	12.0	-	0.3	2.0	330	2000pcs

TAPE SPECIFICATIONS for 92SMX(D)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
11.3	5.3	24.0	11.5	12.0	1.7	0.3	2.7	330	2000pcs

TAPE SPECIFICATIONS for 92SMX(E) & 92SMX(F)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
11.9	5.5	24.0	11.5	12.0	0.4	0.3	3.30	330	1000pcs