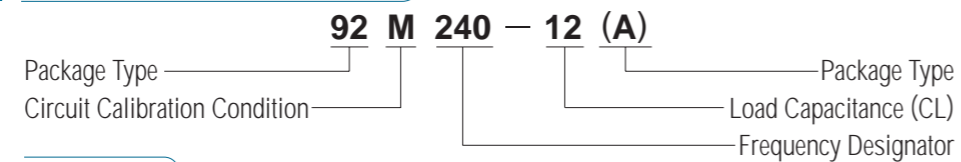


STANDARD SPECIFICATIONS

- Package type 92SMX(A), 92SMX(C) & 49SMX-CB(N)
- Frequency range 92SMX(A) : 14.000 MHz to 40.000 MHz
92SMX(C) : 3.579545 MHz to 25.000 MHz
49SMX-CB(N) : 3.579545 MHz to 80.000 MHz
- Calibration tolerance ± 50 ppm at $+25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
- Temperature stability (referred to $+25^{\circ}\text{C}$) ± 50 ppm over -20°C to $+70^{\circ}\text{C}$ (AT-Cut)
 ± 100 ppm over -10°C to $+60^{\circ}\text{C}$ (BT-Cut)
- Load capacitance 18 pF
- Shunt capacitance (Co) 5 pF max.
- Drive level (P) 100 μW max.
- Aging ± 5 ppm max. at $+25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ per year
- Cut AT-Cut or BT-Cut
- Reflow soldering condition 10 seconds max. at $+235^{\circ}\text{C} \pm 5^{\circ}\text{C}$

PART NUMBERING GUIDE



EXAMPLE

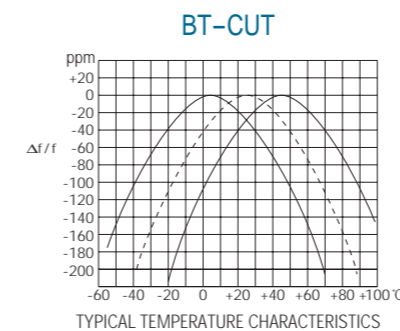
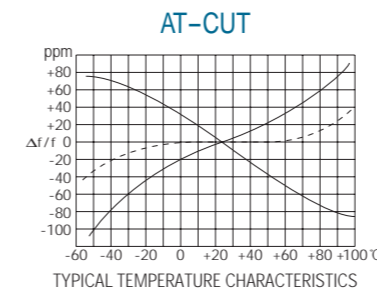
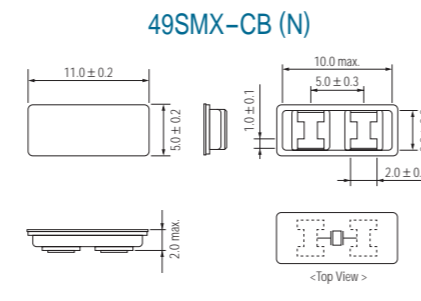
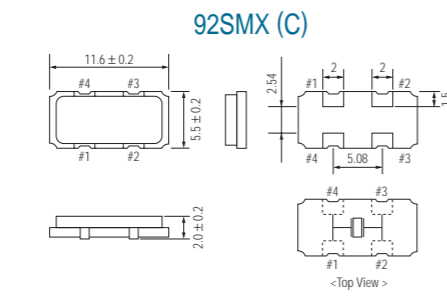
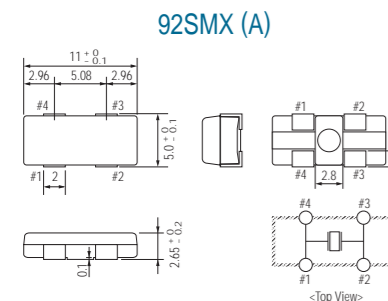
CIRCUIT CALIBRATION CONDITION	FREQUENCY	PACKAGE	SMI PART NO.
Parallel Resonance = M CL = 12 pF (Optional)	240 = 24.000 MHz	92SMX(A)	92M240-12(A)
Parallel Resonance = M CL = 30 pF (Optional)	240 = 24.000 MHz	92SMX(C)	92M240-30(C)
Series Resonance = S (Optional)	240 = 24.000 MHz	49SMX-CB(N)	CB240S(N)

HOW TO ORDER STANDARD SMI CRYSTALS

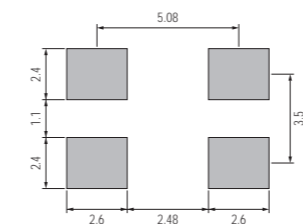
Order by SMI Part No.

PACKAGE DATA

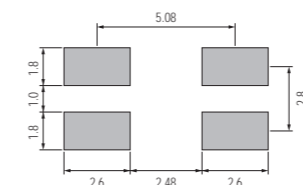
Item	Package	92SMX(A)	92SMX(C)	49SMX-CB(N)
COVER		Plastic	Ceramic	Metal
BASE		Plastic	Ceramic	Glass in metal
SEALING		Press-fit (2x6mm built-in)	Glass-frit	Resistance-weld
TERMINAL PLATING		Solder	Gold	Gold



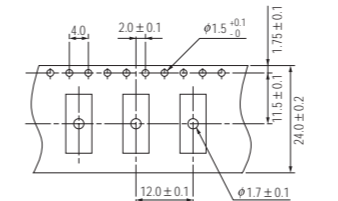
SOLDERING PATTERN for 92SMX(A) & 92SMX(C)



SOLDERING PATTERN for 49SMX-CB(N)



TAPE SPECIFICATIONS



	QTY/REEL	REEL DIA
92SMX(A)	2000 pcs	330 mm
92SMX(C)	2000 pcs	330 mm
49SMX-CB(N)	2000 pcs	330 mm

STANDARD FREQUENCIES

FREQUENCY MHz	FREQUENCY DESIGNATOR	MAXIMUM EQUIVALENT SERIES RESISTANCE OHMS	FREQUENCY MHz	FREQUENCY DESIGNATOR	MAXIMUM EQUIVALENT SERIES RESISTANCE OHMS
3.579545	035	200	16.044000	1604	50
3.648000	0364	200	16.128000	1612	50
3.686400	0368	200	16.147200	1614	50
3.802000	038	200	16.257000	162	50
3.840000	0384	200	16.384000	163	50
3.932160	039	200	16.667000	166	50
4.000000	040	150	16.934400	169	50
4.032000	0403	150	17.000000	170	50
4.096000	0409	150	17.100000	171	50
4.194304	041	150	17.700000	177	50
4.200000	042	150	17.734475	1773	50
4.433619	044	150	18.000000	180	50
4.500000	045	150	18.432000	184	50
4.608000	046	150	18.867000	188	50
4.800000	048	150	18.869000	1886	50
4.883300	0488	150	18.870000	1887	50
4.915200	049	150	19.200000	192	50
5.120000	051	150	19.660800	196	50
5.699623	056	150	20.000000	200	50
6.000000	060	100	20.480000	204	50
6.144000	061	100	20.736000	207	50
6.500000	065	100	22.118400	221	50
7.250000	072	100	24.000000	240	50
7.372800	073	100	24.000140	240001	50
7.680000	076	100	24.576000	245	50
7.864320	078	100	25.000000	250	50
8.000000	080	100	25.175000	251	40
9.090500	0909	100	25.312000	253	40
9.216000	092	100	27.000000	270	40
9.600000	096	100	28.000000	280	40
9.756000	097	100	28.224000	282	40
9.830400	098	100	28.636363	286	40
10.000000	100	80	28.800000	288	40
10.240000	1024	80	29.491200	294	40
10.752000	1075	80	30.000000	300	40
11.000000	110	80	32.000000	320	40
11.059200	1105	80	32.215909	322	40
11.673600	116	80	33.333000	333	40
11.700000	117	80	33.868800	338	40
12.000000	120	80	35.251200	352	40
12.096000	1209	80	35.468950	354	40
12.288000	122	80	36.000000	360	40
12.296000	1229	80	40.000000	400	40
13.500000	135	80	40.320000	403	40
14.318180	143	50	44.236800	442	40
14.400000	144	50	48.000000	480	80 3rd OT
14.484000	1448	50	49.920000	499	80 3rd OT
14.644000	146	50	50.000000	500	80 3rd OT
14.745600	147	50	50.680000	506	80 3rd OT
15.000000	150	50	52.416000	524	80 3rd OT
15.360000	153	50	56.448000	564	80 3rd OT
15.500000	155	50	59.800000	598	80 3rd OT
15.728640	157	50	64.000000	640	80 3rd OT
16.000000	160	50	80.000000	800	80 3rd OT
16.000312	160003	50			