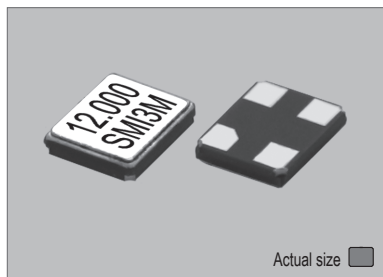
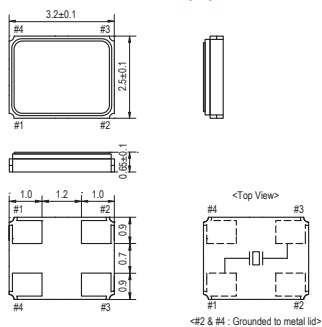


32SMX(A)

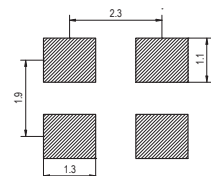


Actual size  
0.0165 gm (wt.)

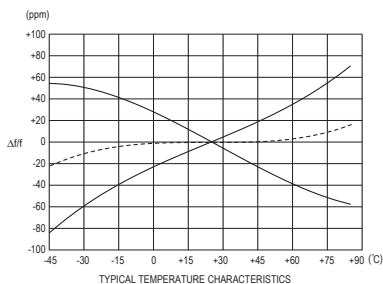
32SMX(A)



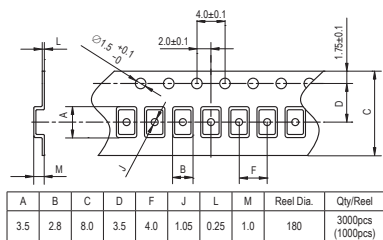
SOLDERING PATTERN



AT-CUT



TAPE SPECIFICATIONS



CUSTOM SPECIFICATIONS

Item	Specifications										
Package type	32SMX(A)										
Frequency range	10.000 MHz to 150.000 MHz										
Frequency tolerance (at +25°C ±3°C)	O : ±10 ppm Q : ±15 ppm R : ±20 ppm										
Temperature stability (referred to +25°C)											
	Temp. Stability(ppm)	±3.0	±5.0	±7.5	±10.0	±15.0	±20.0	±30.0	±50.0	±100.0	±150.0
Opn. Temperature Range		FF	JJ	LL	OO	QQ	RR	TT	XX	CC1	GG1
0°C to +45°C (edd)		○	○	○	○	○	○	○	○	○	○
0°C to +50°C (eee)		○	○	○	○	○	○	○	○	○	○
0°C to +60°C (egg)		○	○	○	○	○	○	○	○	○	○
0°C to +70°C (eii)			○	○	○	○	○	○	○	○	○
-10°C to +50°C (gee)			○	○	○	○	○	○	○	○	○
-10°C to +60°C (ggg)			○	○	○	○	○	○	○	○	○
-10°C to +70°C (gii)			○	○	○	○	○	○	○	○	○
-10°C to +75°C (gij)				○	○	○	○	○	○	○	○
-20°C to +70°C (iii)				○	○	○	○	○	○	○	○
-20°C to +75°C (ijj)					○	○	○	○	○	○	○
-30°C to +75°C (kij)					○	○	○	○	○	○	○
-30°C to +80°C (kkk)					○	○	○	○	○	○	○
-30°C to +85°C (kll)					○	○	○	○	○	○	○
-35°C to +80°C (lkk)						○	○	○	○	○	○
-40°C to +85°C (mll)							○	○	○	○	○
-40°C to +90°C (mmm)								○	○	○	○
-40°C to +105°C (mpp)									○	○	○
-40°C to +125°C (mtt)										○	○

○ : Available (The extremes depend on actual frequencies.)

Equivalent series resistance (ESR)	300 Ω max. / 10.000 MHz to 12.000 MHz (Fundamental) 100 Ω max. / 12.000 MHz to 13.000 MHz (Fundamental) 80 Ω max. / 13.000 MHz to 20.000 MHz (Fundamental) 50 Ω max. / 20.000 MHz to 60.000 MHz (Fundamental) 140 Ω max. / 40.000 MHz to 100.000 MHz (3rd overtone) 100 Ω max. / 100.000 MHz to 150.000 MHz (3rd overtone)
Shunt capacitance (C0)	5 pF max.
Drive level (P)	100 μW max. (10 μW for testing)
Aging	±2 ppm max. at +25°C ±3°C for first year
Cut / Oscillation mode	AT-Cut / Fundamental / 10.000 MHz to 60.000 MHz AT-Cut / 3rd overtone / 40.000 MHz to 150.000 MHz
Reflow condition	10 seconds max. at +250°C ±10°C

PART NUMBERING GUIDE

24.576MHz 32SMX(A) R / TT / ijj / 8



Example

SMI Part No.	Frequency	Package	Frequency Tolerance	Temperature Stability	Operating Temperature Range	Load Capacitance
24.576MHz 32SMX(A) R/TT/ijj/8	24.576 MHz	32SMX(A)	R = ±20 ppm	TT = ±30 ppm	ijj = -20°C to +75°C	CL = 8 pF

PACKAGE DATA

Item	Package	32SMX(A)
Lid		Metal
Base		Ceramic
Sealing		Seam
Terminal		Tungsten (metalized)
Terminal plating		Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)