

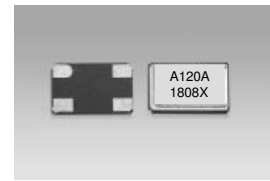
# SURFACE MOUNT CRYSTAL UNITS (Rohs Compliant / Lead Free)

## Ceramic Crystal SMD5x3.2mm (AP4-SMD05 Series)



### - SPECIFICATIONS

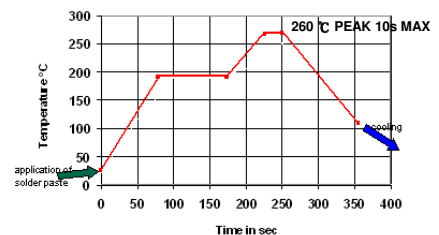
FREQUENCY RANGE		8.0MHz TO 48.000 MHz
MODE OF OSCILLATION	FUNDAMENTAL	8.0MHz TO 48.000 MHz
FREQUENCY TOLERANCE AT 25°C		±50PPM MAXIMUM <±50PPM ARE AVAILABLE
FREQUENCY STABILITY OVER TEMPERATURE RANGE		±50PPM MAXIMUM <±50PPM ARE AVAILABLE
OPERATING TEMPERATURE RANGE		-10°C TO +70°C STANDARD -40°C TO +85°C EXTENDED
STORAGE TEMPERATURE RANGE		-40°C TO +85°C
SHUNT CAPACITANCE		7pF MAXIMUM
LOAD CAPACITANCE		8pF TO SERIES OR SPECIFIED
EQUIVALENT SERIES RESISTANCE (ESR)		SEE TABLE
DRIVE LEVEL		10 TO 300µW
AGING PER YEAR		±5PPM MAXIMUM STANDARD <±5PPM ON REQUEST



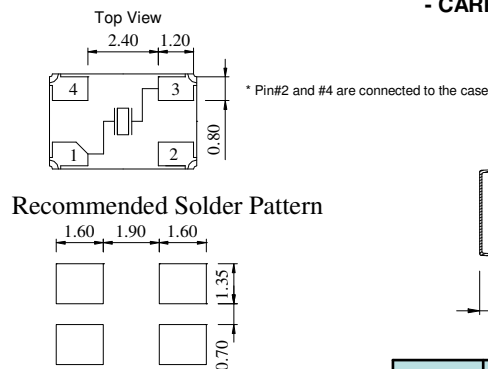
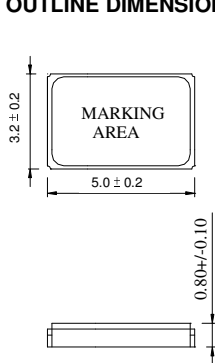
### - Equivalent Series Resistance (ESR) and Mode Of Vibration (Mode)

Frequency Range (MHz)	ESR max.	Mode
8.000 to 19.999	80	Fundamental
20.000 to 29.999	70	Fundamental
30.000 to 48.000	50	Fundamental

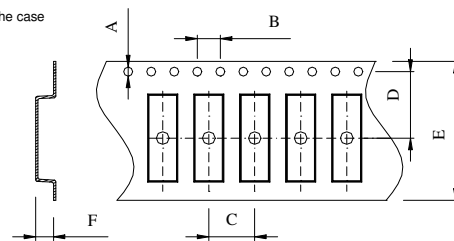
### - SOLDER REFLOW PROFILE



### - OUTLINE DIMENSIONS



### - CARRIER TAPE DIMENSIONS (1,000 pcs/reel)



A	B	C	D	E	F
1.5 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	5.5 ± 0.1	16.0 ± 0.3	1.5 ± 0.1

Unit: mm

ORDERING CODE SYSTEM (VERSION 1.2 UPDATED NOVEMBER 2008)					EXAMPLE:
SERIES	FREQUENCY	LOAD CAPACITANCE	TEMPERATURE RANGE	TOLERANCE/STABILITY	AP4-SMD05-12-12X-2020
AP4-SMD05	IN MHZ	8pF TO SERIES OR SPECIFIED	X: EXT.TEMP.-40 TO +85°C BLANK: STANDARD	2020: PPM/PPM BLANK: STANDARD	

NON STANDARD FREQUENCIES AND SPECIFICATIONS ARE AVAILABLE ON REQUEST

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Specifications are subject to change without notice