

**RoHS Compliant
Pb - Lead Free**

Ltr	Revisions	Date	Appr

Electrical Specifications:

Frequency Range		7.372 to 133.000	MHz
Mode of Oscillation	Fundamental	7.372 to 52.000	MHZ
	Third Overtone	40.000 to 133.000	
Frequency Tolerance at 25°C	Standard	±30	PPM Max
	Optional	±25	
		±20	
		±15	
		±10	
Frequency Stability over Temperature Range	Standard	±50	PPM Max
	Optional	±30	
		±25	
		±20	
		±15	
Operating Temperature Range	Standard	-10 to +70	° C
	Extended	-40 to +85	
Storage Temperature Range		-55 to +125	
Aging		±3	PPM Max/Year
Load Capacitance		10 to 32 and Series Resonance	pF
Shunt Capacitance		7.0	
Equivalent Series Resistance (ESR)		See ESR Table	Ohms
Drive Level		100	uW Typ
Insulation Resistance		500 at at 100 Vdc ± 15 Vdc	M Ohms

Frequency Range and ESR Values:

Frequency Range in MHz	ESR Ohm Max	Mode of Operation	Frequency Range in MHz	ESR Ohm Max	Mode of Operation
7.372 to 7.999	100	Fundamental	40.000 to 51.999	100	3rd Overtone
8.000 to 9.999	70	Fundamental	52.000 to 79.999	80	3rd Overtone
10.000 to 11.999	50	Fundamental	80.000 to 133.000	70	3rd Overtone
12.000 to 19.999	30	Fundamental			
20.000 to 24.999	25	Fundamental			
25.000 to 52.000	20	Fundamental			



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All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

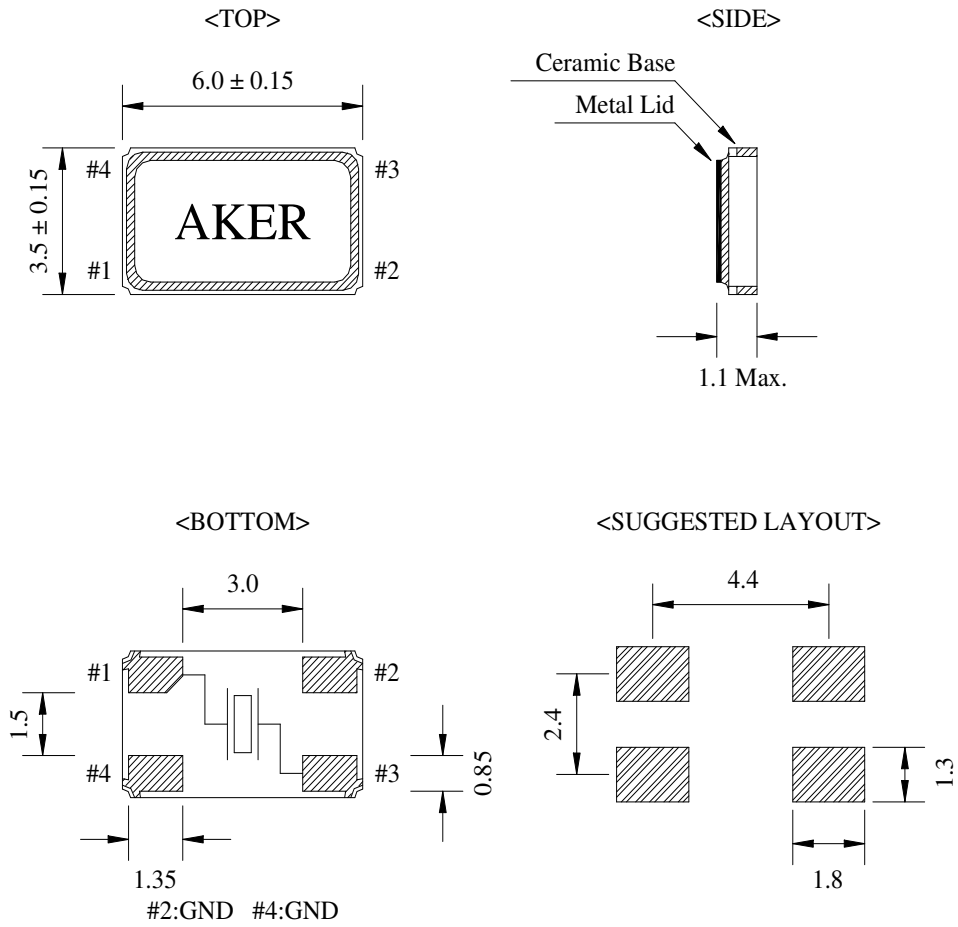
Page: 1/4 Date: Dec 1, 2018

Specification Title:

**Microprocessor Crystal Unit
Low Profile
6.0 x 3.5 millimeter Surface Mount - 4 Pad
General Product Specification**

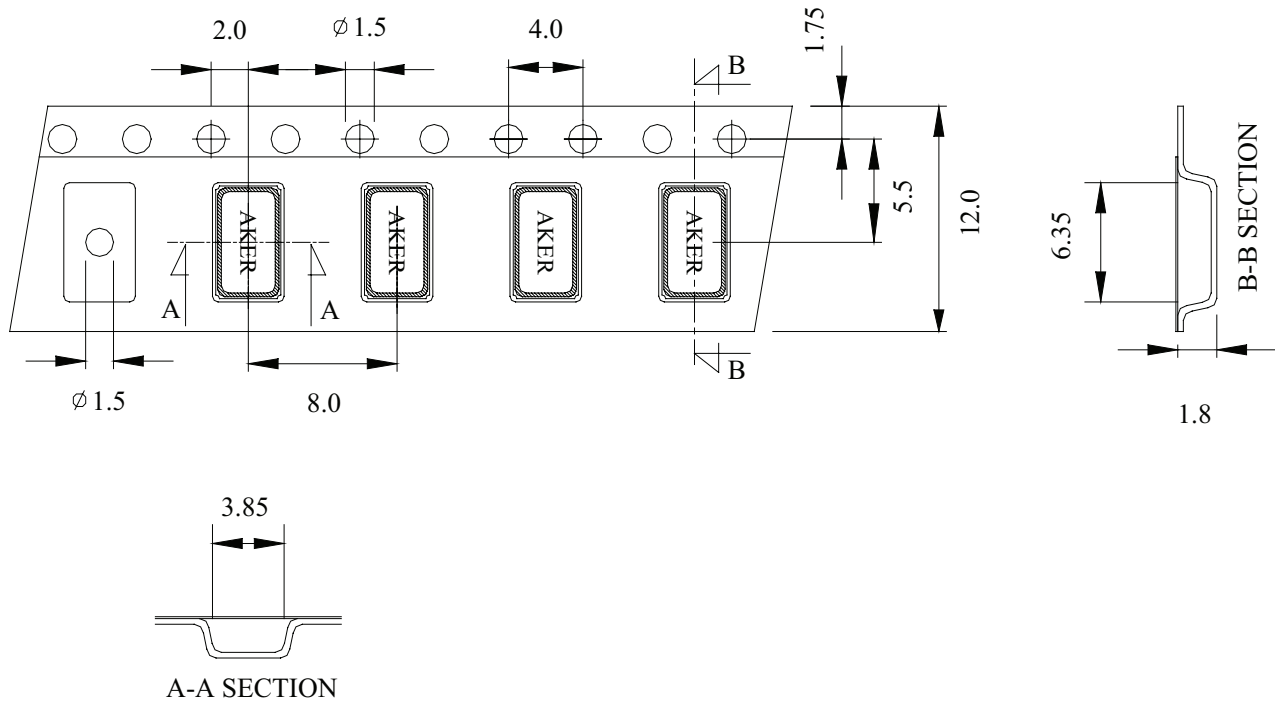
Part Number: **C6S Series**

Mechanical Outline:

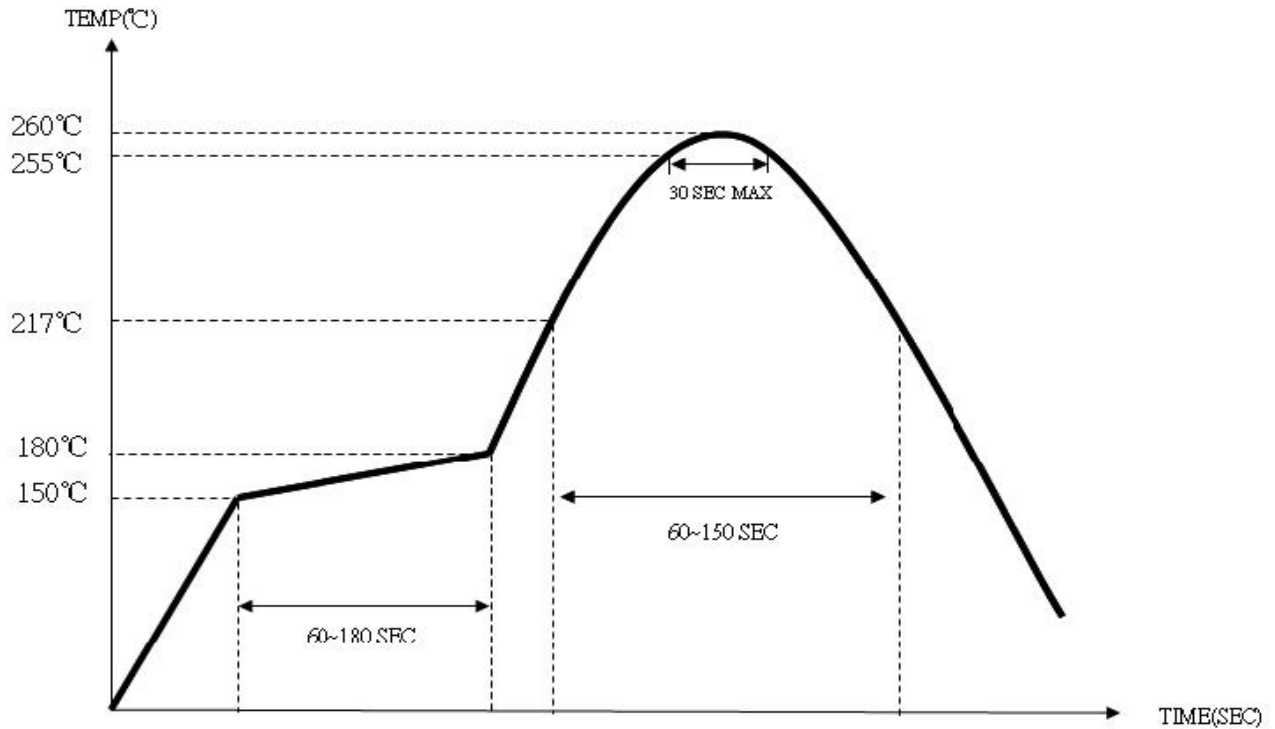


**Package is Seam Sealed Ceramic-Metal.
Dimensions are millimeters.**

Carrier Tape Dimensions:



Solder Reflow Characteristics:



How to build a Part Number:

Series	C	Parameter	
Package	6S	6.0 x 3.5 mm - 4 Pad	
Frequency	7.372 to 133.000	MHz	
Load Capacitance	10	10 pF	
	12	12pF	
	16	16 pF	
	18	18 pF	
	20	20 pF	
	32	32 pF	
	S	Series	
Frequency Tolerance	Standard	30	±30 PPM
	Option	25	±25 PPM
		15	± 15 PPM
		10	±10 PPM
Frequency Stability	Standard	50	±50 PPM
	Option	30	±30 PPM
		25	±25 PPM
		15	±15 PPM
		10	±10 PPM*
Mode of Oscillation	See Notes	3	Fundamental Third Overtone
Temperature Range	Standard	See Notes	-10 to +70 °C
	Extended	X	-40 to +85 °C
Packaging	M		250pcs Reel
	R		1000pcs Reel

Part Number Example:

C6S-80.000-S-3030-3-R

C6S: 3.5 x 6.0 mm SMD Seam Seal Package - 4 Pad

80.000 MHz Nominal Frequency

S: Series Resonance

3030: ±30 PPM Frequency Tolerance and ±30 PPM Frequency Stability

3: Third Overtone Mode

-10 to +70° C Temperature Range

R: Tape and Reel Packaging - 1000pcs Reel

Notes:

1- Fundamental mode does not need to be included in Part Number description.

* ±10 PPM Temperature Stability is only available from -30 to +85° C.

2- Standard Temperature Range does not need to be included in Part Number description.

3- Product is shipped in Tape and Reel configuration. Each reel contains 1000 pieces.

4- Quantities less than 1000 are shipped bulk in ESD pouches.

5- Specification subject to change without notice.