

49U DIP Type Crystal

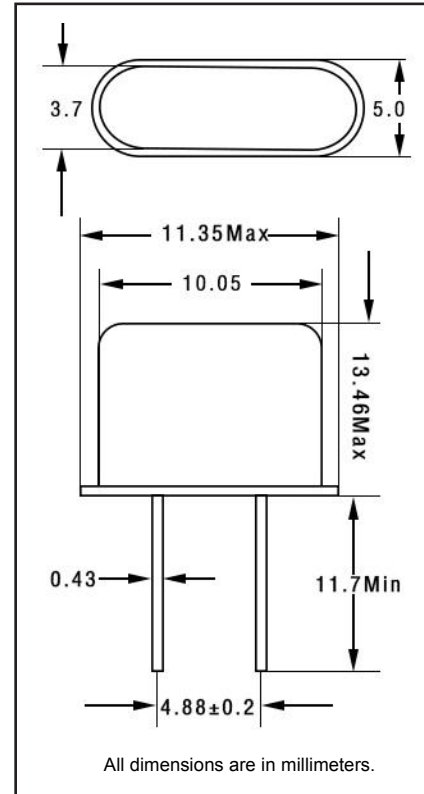
Think SAW, Think STRONG!



DATASHEET

High reliability by means of resistance weld hermetic seal.
 Excellent aging characteristics.
 RoHS compliant and lead free.

• C4ST STANDARD SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	1.8432~48.0MHz(F) 26.0 ~ 90.0MHz(3OT) 80.0 ~ 176.0MHz(5OT)
Frequency Tolerance @ 25°C	-/+10ppm , -/+30ppm , or specify
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	(See options below)
Operating (TOPR)	-55°C ~ +105°C
Storage (TSTG)	
Shunt Capacitance (Co)	7pF
Load Capacitance (CL)	16pF, 18pF, 20pF, or specify
Drive Level	0.5 mW (0.1 mW Typical)
Aging per year	±2 PPM ± 5PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Sn/Ag/Cu
Seam Method	Resistance Weld
Lead (Pb) Free	Yes
RoHS Compliant	Yes



Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary. All specifications subject to change without notice.

Frequency Range (MHz)	Operating Mode	Max ESR Ω
1.8432	Fundamental	500
2.0~2.9	Fundamental	350
3.1~3.0	Fundamental	200
3.2~3.9	Fundamental	150
4.0~4.4	Fundamental	100
4.5~4.9	Fundamental	80
5.0~6.9	Fundamental	50
7.0~9.9	Fundamenta	35
10.0~48.0	Fundamenta	25
26.0~90.0	3rd	70
80.0~176.0	5th	120

• Available Operating Temperatures and Stabilities*

Operating Temperature	±5 PPM	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM	±100 PPM
-10°C to +60°C	O	O	O	O	O	O	O	O
-20°C to +70°C	Δ	O	O	O	O	O	O	O
-40°C to +85°C	X	O	O	O	O	O	O	O
-40°C to +105°C	X	X	X	X	X	Δ	O	O
-40°C to +125°C	X	X	X	X	X	X	Δ	O
-55°C to +125°C	X	X	X	X	X	X	Δ	O

Key: O=Available, X=Not Available, Δ=Consult STRONG Technical Support
 *Does not imply a stocked part.

Thru-Hole Crystal

Think SAW, Think STRONG!



DATASHEET

Page 2 of 3

Available Options & Part Identification for Thru-Hole Crystal C4ST*

49U-1.8432M-20-30-30-A

49U	1.8432M	20	C	B	F	T&R
Package	Frequency (MHz)	Load Capacitance S=Series 10=10pF 12=12pF 16=16pF 18=18pF 20=20pF 22=22pF 27=27pF 30=30pF 32=32pF 33=33pF	Tolerance 50=50ppm 30=30ppm 25=25ppm 20=20ppm 15=15ppm 10=10ppm	Stability 100=100ppm 50=50ppm 30=30ppm 25=25ppm 20=20ppm 15=15ppm 10=10ppm 5=5ppm	Operating Temperature A= 0 ~ +60 °C B= -10 ~ +60 °C C= -10 ~ +70 °C D= -20 ~ +70 °C E= -40 ~ +85 °C F= -55 ~ +105 °C D= -55 ~ +125 °C G= -55 ~ +125 °C	Tape&Reel T&R Or Blank

*Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.



Headquarters

8/F, Charming Building 72-74, Chang Sha
Wan Rd, Kowloon, Hong Kong
info@strongelectronics.net

www.strongelectronics.net

Sales

Tel: 86-755-84528985
sales@strongelectronics.net
www.sawfilter.cn/en/contact.as

p

Tech Support

www.strongelectronics.net/support

PRODUCT USE: STRONG Electronics reserves the right to modify the products and/or specifications described herein at any time and at STRONG Electronics' sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of STRONG Electronics' products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of STRONG Electronics or any third parties. STRONG Electronics' products are not intended for use in applications involving extreme environmental conditions or in life support systems or similar devices where the failure or malfunction of a STRONG Electronics product can be reasonably expected to significantly affect the health or safety of users. Anyone using a STRONG Electronics product in such a manner does so at their own risk, absent an express, written agreement by STRONG Electronics. STRONG Electronics and the STRONG logo are registered trademarks of STRONG Electronics. Product specification is subject to change without notice. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of STRONG Electronics or their respective third party owners. For datasheet type definitions and a glossary of common terms, visit <http://www.strongelectronics.net>

© Copyright 2017 STRONG Electronics, Revised 20/04/2017.

Для заказа отправьте заявку на почту: mail@kvarci.ru