

PRODUCT SELECTION GUIDE

Tuning Fork

Crystal Units

Crystal Oscillators

VCXO,VCTCXO

TCXO,OCXO

SAW Filter & Resonator

Ceramic Filter & Resonator



公司简介

Company Introduction

苏州杭晶电子科技有限公司成立于2014年，专注于石英频率控制元件之研发、设计、生产与销售，是研产销一体的科技中小型企业。

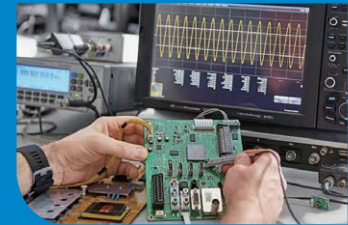
通过专业的团队组合及先进之生产技术，搭建起石英晶体、晶体振荡器、晶体滤波器、温度补偿型及电压控制型产品等多条完整的产品线。以健全的供应链系统，高品质产品、极低失效率保障以及快速专业的售前售后服务。在压电晶体行业，杭晶电子的技术、质量均处于领先地位。

SUZHOU HANGJING ELEC&TECH CO.,LTD. was founded in 2014,we specialize in the research, development, production and sale of quartz frequency controlling units. Through a professional team and advanced production technology, we have established product lines for quartz crystal, crystal oscillator, crystal filter, VCXO and TCXO.

With a robust supply chain system, high-quality products, extremely low failure rate and fast and professional pre-sales and after-sales service. In Piezoelectric Crystal Industry, HangJing's technology and quality are in a leading position.

产品应用范围涵盖移动电话、平板电脑、卫星通讯、车载系统、全球定位系统、个人电脑、无线通信及家用产品等，扮演基本信号源产生、传递、滤波等功能。持续致力于技术研究开发及品质落实扎根，营运据点遍布香港、台湾、北京、深圳、成都、上海、杭州、苏州等世界各地，使杭晶得以提供服务予世界电子大厂。

Our products are widely applied to different areas, including mobile phones, tablet computers, satellite communications, automotive systems, global positioning systems, personal computers, wireless communications and household appliances. The products have the functions of fundamental signal source generating, transmission, filtering etc. We are committed to technology R&D and quality assurance, and now we have offices in Hong Kong, Taiwan, Beijing, Shenzhen, Chengdu, Shanghai, Hangzhou, Suzhou etc., to provide services to the world's electronics makers.



SERVED MARKETS

Communications / Telecom

LAN, Gigabit Ethernet, SONET, VOIP
WLAN, WiFi, WiMax, Bluetooth
Fiber technology
Telecommunication infrastructure
Broadcasting infrastructure

Consumer / Office

Household equipment and utensils
Camera and video devices
Wearable electronic devices
Fax, Printer, Copy and scan machines

Industrial / Meters / Equipm.

Transformer, power converter
Alarm and security systems
Power meters, water and gas meters
Electronic test equipment
ATM and card readers
Automation

Medical

Medical test equipment and instrumentation
Handheld medical devices

Automotive














Car control units, car accessories
GPS and WiFi
Car radio and HiFi

OTHERS

Computers, PDAs and peripherals
Hard drives and portable thumb drives
Mass storage devices and server
Toy industry





















Tuning Fork

kHz CRYSTAL UNITS

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	1.2x1.0	4	32.768kHz	* Tolerance(@25°C)±20/±30ppm * Operating temperature -40~+85°C -40~+125°C -55~85°C -55~125°C * Load capacitances 6, 7, 9, 12.5pF	FC10M4	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored
	1.6x1.0	2	32.768kHz		FC11M2	
	2.0x1.2	2	32.768kHz		FC21M2	
	3.2x1.5	2	32.768kHz		FC31M2	
	4.1x1.5	2	32.768kHz		FC41M2	
	7.0x1.5	4	32.768kHz	* Tolerance(@25°C)±20/±30ppm * Operating temperature -20~70°C -40~+85°C * Load capacitances 6, 7, 9, 12.5pF	FR07S4	* RoHS compliant by exemption * Halogen-Free
	8.0x3.8	4	32.768kHz		FR08S4	
	10.4x4.1	4	32.768kHz		FR10SH	
	∅2x6	2	32.768kHz		FL26S2	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored
	∅2x6	2	32.768kHz 32~100kHz		FL26T2	
	∅3x8	2	32.768kHz 32~100kHz		FL38T2	
	∅3x8	2	32.768kHz 32~100kHz		FL38T2	
	7.5x3.1	2	32.768kHz		FL37S2	

Crystals

MHz CRYSTAL UNITS

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	11.0x4.6x3.5	2	3.2~64MHz	* Tolerance(@25°C)±10 to ±50ppm * Stability over operating temperature ±10 to ±150ppm * Operating temperature range(TYP) -10~+60°C -20~+70°C -40~+85°C -40~+105°C (Seam seal SMD type) -40~+125°C (Seam seal SMD type) -55~85°C -55~125°C * Load capacitances 6~32pF or series * Automotive Grade crystals per AEC-Q200 standard be available (Seam seal SMD type)	X49ST2	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	11.0x4.6x3.5	3	3.2~64MHz		X49ST3	
	11.4x4.6x4.2	2	3.2~64MHz		X49SS2	
	11.4x4.6x4.2	3	3.2~64MHz		X49SS3	
	11.4x4.6x4.2	4	3.2~64MHz		X49SS4	
	7.0x4.0x2.0	2	8~50MHz		X497S2	
	11.4x4.6x13.5	2	1.8~150MHz		X49UT2	
	7.8x2.4x7.8 7.8x2.4x6.0	2	4~200MHz		XUM1T2 XUM5T2	
	1.2x1.0	4	26~52MHz		XC10M4	
	1.6x1.2	4	24~100MHz		XC11M4	
	2.0x1.6	4	20~100MHz		XC21M4	
	2.5x2.0	4	12~100MHz		XC22M4	
	3.2x2.5	4	8~100MHz		XC32M4	
	5.0x3.2	4	8~100MHz		XC53M4	
		2			XC53M2	
	6.0x3.5	4	7.5~100MHz		XC63M4	
		2		XC63M2		
	7.0x5.0	4	6~100MHz	XC75M4		
	5.0x3.2	2	8~100MHz	XC53G2	* RoHS compliant by exemption * Halogen-Free	
	6.0x3.5	2	7.5~100MHz	XC63G2		

THERMISTOR CRYSTAL UNITS

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	1.6x1.2	4	38.4~76.8MHz	* Tight stability and highly reliable. * Very low DLD. * High fundamental frequency design. * Suitable for mobile communication.	XT11M4	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored
	2.0x1.6	4	19.2~76.8MHz		XT21M4	
	2.5x2.0	4	19.2~76.8MHz		XT22M4	

OSCILLATORS

HC MOS output OSCILLATORS in SMD ceramic seam seal packages

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	1.6x1.2	4	32.768kHz 1~60MHz	* Tight stability and highly reliable oscillators. * Suitable for smallest applications. * Over all stability from 25 to 100ppm available. * Operating temperature ranges (TYP) -20~+70°C -40~+85°C -40~+125°C -55~85°C -55~125°C * Supply voltages 1.8~5.0V	CO11H4	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	2.0x1.6	4	32.768kHz 1~60MHz		CO21H4	
	2.5x2.0	4	32.768kHz 1~200MHz		CO22H4	
	3.2x2.5	4	32.768kHz 1~200MHz		CO32H4	
	5.0x3.2	4	32.768kHz 1~200MHz		CO53H4	
	7.0x5.0	4	32.768kHz 1~200MHz		CO75H4	
		6	150~250MHz		CO75H6	

LVPECL output OSCILLATORS in SMD ceramic seam seal packages

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	2.5x2.0	6	10~250MHz	* Over all stability 25 to 100ppm available. * Operating temperature ranges (TYP) -20~+70°C -40~+85°C -55~85°C -55~125°C * Supply voltages 2.5V and 3.3V.	CO22P6	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	3.2x2.5	6	10~2100MHz		CO32P6	
	5.0x3.2	6	10~2100MHz		CO53P6	
	7.0x5.0	6	10~2100MHz		CO75P6	



LVDS output OSCILLATORS in SMD ceramic seam seal packages

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	2.5x2.0	6	10~250MHz	* Over all stability 25 to 100ppm available. * Operating temperature ranges (TYP) -20~+70°C -40~+85°C -55~85°C -55~125°C * Supply voltages 1.8V, 2.5V and 3.3V.	CO22D6	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	3.2x2.5	6	10~2100MHz		CO32D6	
	5.0x3.2	6	10~2100MHz		CO53D6	
	7.0x5.0	6	10~2100MHz		CO75D6	





HC SL output OSCILLATORS in SMD ceramic seam seal packages

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	2.5x2.0	6	10~250MHz	* Over all stability 25 to 100ppm available. * Operating temperature ranges (TYP) -20~+70°C -40~+85°C -55~85°C -55~125°C * Supply voltages 1.8V, 2.5V and 3.3V.	CO22C6	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	3.2x2.5	6	13.5~700MHz		CO32C6	
	5.0x3.2	6	13.5~700MHz		CO53C6	
	7.0x5.0	6	13.5~700MHz		CO75C6	

HC MOS output OSCILLATORS in DIP type packages (THRU-HOLE)








PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	DIP14(20x13)	4	32.768kHz 1~160MHz	* Over all stability 25 to 100ppm available. * Operating temperature ranges (TYP) -20~+70°C; -40~+85°C; -55~85°C; -55~125°C * Supply voltages 1.8~5.0V	CD14H4	* RoHS compliant * Lead-Free
	DIP8(13x13)	4	32.768kHz 1~160MHz		CD08H4	

EMI Reduction spread spectrum CMOS output OSCILLATORS





PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	2.5x2.0	4	0.67~170MHz	* Center spread $\pm 0.25\%$ to $\pm 2.0\%$ * Down spread -0.5% to -4.0% * Modulation freq. 6.3kHz to 55.5kHz Spread profile triangle typ. * Operating temperature ranges (TYP) -40~+85°C -40~+105°C -55~85°C -55~125°C * OE or ED function	CO22E4	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	3.2x2.5	4	0.67~170MHz		CO32E4	
	5.0x3.2	4	0.67~170MHz		CO53E4	
	7.0x5.0	4	0.67~170MHz		CO75E4	

TCXO/VCTCXO

Clipped Sine wave/CMOS output TCXO/VCTCXO in SMD ceramic seam seal packages





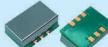


PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	SERIES	HCI PN	ENVIRONMENTAL COMPLIANCE
	2.0x1.6	4	10~55MHz	* Stability 0.5 to 2.5ppm available. * Operating temperature ranges(TYP) -10~+60°C; -20~+70°C -30~+85°C; -40~+85°C * Frequency tolerance 1 or 2ppm. * Supply voltages 1.8V,2.5V,3.0V,3.3V. * Low power consumption <2mA available(Seam seal type). * VCTCXO frequency pull ranging 0.5 to 5ppm(TYP). * HCMOS/LVDS/LVPECL output can be provided. (Please contact us).	TCXO VCTCXO	TC21S4 UC21S4	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA
	2.5x2.0	4	10~55MHz		TCXO VCTCXO	TC22S4 UC22S4	
	3.2x2.5	4	10~50MHz		TCXO VCTCXO	TC32S4 UC32S4	
	5.0x3.2	4	10~50MHz		TCXO VCTCXO	TC53S4 UC53S4	
	7.0x5.0	4	5~50MHz		TCXO VCTCXO	TC75S4 UC75S4	
		4	STRATUM 3 5~30MHz		TCXO VCTCXO	TC75S4 UC75S4	
		10	STRATUM 3 5~30MHz		TCXO VCTCXO	TT75SA UT75SA	

Sine wave/CMOS output TCXO/VCTCXO in other packages

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	SERIES	HCI PN	ENVIRONMENTAL COMPLIANCE
	5.0x3.2	4	10~52MHz	* Stability 0.28 to 2.0ppm available. * Operating temperature ranges(TYP) -10~+60°C; -20~+70°C -30~+85°C; -40~+85°C; -55~+95°C * Frequency tolerance 1 or 2ppm. * Supply voltages 3.3V,5.0V. * VCTCXO frequency pull ranging 0.5 to 5ppm(TYP). * HCMOS output can be provided.	TCXO VCTCXO	TR53S4 TR53H4	* RoHS compliant * Lead-Free
	7.0x5.0	4	10~52MHz		TCXO VCTCXO	TR75S4 TR75H4	
	14x9	6	1.25~150MHz		TCXO VCTCXO	TS14S6 US14S6 TS14H6 US14H6	
	DIP14 (20x13)	4	10~52MHz		TCXO VCTCXO	TD14H4	








VCXO

HCMOS/LVPECL/LVDS/HCSL output VCXO

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE	
	2.5x2.0	6	1.25~250MHz	* Over all stability 25 to 100ppm available. * Operating temperature ranges (TYP) -20~+70°C -40~+85°C * Supply voltages 1.8V, 2.5V ,3.3V and 5V * Frequency pull ranging ±50ppm, ±100ppm.	VC22H6 VC22P6 VC22D6 VC22C6	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored * Parts do not contain PFOS/PFOA	
	3.2x2.5	6	1.25~1500MHz		VC32H6 VC32P6 VC32D6 VC32C6		
	5.0x3.2	6	1.25~1500MHz		VC53H6 VC53P6 VC53D6 VC53C6		
	7.0x5.0	6	1.25~1500MHz		VC75H6 VC75P6 VC75D6 VC75C6		
	14x9	6	40~150MHz		VC14H6 VC14P6 VC14D6 VC14C6		
	DIP14(20x13)	4	1.25~250MHz		VD14H4		* RoHS compliant * Lead-Free
	DIP8(13x13)	4	1.25~250MHz		VD08H4		


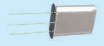


OCXO

Sine Wave/CMOS/LVTTL output Oven Controlled Crystal Oscillators(OCXO)










PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONM COMPLIA
	36x27	5	5~500MHz	* ±0.5ppb @-40~85°C; 30ppb/year; -160dbc/Hz@1kHz(100MHz)	OD36H5 OD36S5	* RoHS compliant * Lead-Free
	25x25	5	5~500MHz	* ±1ppb @-40~85°C; 10ppb/year; -160dbc/Hz@1kHz(100MHz)	OD25H5 OD25S5	
	20x20	5	5~500MHz	* ±2ppb @-40~85°C; 10ppb/year; -165dbc/Hz@1kHz(100MHz)	OD20H5 OD20S5	
	DIP14 (20x13)	4	10~100MHz	* ±100ppb @-40~85°C; 500ppb/year; -160dbc/Hz@1kHz(100MHz)	OD14H4 OD14S4	
	25x22	7	5~125MHz	* ±2ppb @-40~85°C; 10ppb/year; -150dbc/Hz@1kHz(10MHz)	OS25H7 OS25S7	
	14x9	6	10~50MHz	* ±5ppb @-40~85°C; 60ppb/year; -145dbc/Hz@1kHz(10MHz)	OS15H6 OS15S6	
	9.7x7.5	4	10~40MHz	* ±20ppb @-40~85°C; 600ppb/year; -145dbc/Hz@1kHz(10MHz)	OS97H4 OS97S4	

Filter & Resonator










Crystal Filter

PHOTO	PACKAGE LxW [mm]	PINS	FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONM COMPLIA
	7.9x3.3x8.0 7.9x3.3x5.8	3/6	10-45MHz	* Low Insertion loss * High selectivity * Shock Resistant , High reliability	CFUMT3	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored
	11x4.7x13.5 11x4.7x11.0	3/6	7.8-60MHz		CF49T3	
	11 x 8.5 to 18 x 12	4	7.8-60MHz		CFMH4	
	7.0x5.0x1.3	6	21.4/21.7/45MHz		CF75M6	









SAW Filter

PHOTO	PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	LxW[mm]	PINS				
	1.1 x 0.9 x 0.5	5	800-2605MHz	* CSP process with chip scale package * Standardization of small size * Good stability and high reliability * Mainly used in GPS navigation * TDD/FDD communication and artificial intelligence chips	SF10S5	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored
	1.4 x 1.1 x 0.6	5	800-2605MHz		SF11S5	
	2.0 x 1.5 x 0.6	4	800-2605MHz		SF21S5	
	3.0 x 3.0 x 1.25	6	300-2605MHz	* Low-loss SAW component * Low amplitude ripple * Sharp rejections at both out-bands	SF33M6	
	3.8 x 3.8 x 1.5	6	100-1000MHz		SF44M6	
	5.0 x 5.0 x 1.5	8	100-1000MHz		SF55M8	
	8.4 x 3.5 x 2.9	3	100-1000MHz	* IF filter for DSB receivers * Constant group delay * Improved ESD capability by integrated shunt resistors * Optimized group delay time * Stable performance	SFD11	
	11.0 x 4.5 x 3.2	4	100-1000MHz		SFF11	
	Φ9.15 X 3.15	3	100-1000MHz		SFT039	

SAW Resonator

PHOTO	PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	LxW[mm]	PINS				
	2.0 x 1.6 x 1.0	4	154MHz-1000MHz	* High transmit and receive sensitivity * High temperature resistance and impact resistance * Good power and reliability	SR21S4	* RoHS compliant * Lead-Free * Halogen-Free * REACH compliance verified, continuously monitored
	3.2 x 2.5 x 1.0	4	154MHz-1000MHz		SR32M4	
	3.0 x 3.0 x 1.25	6	154MHz-1000MHz		SR33M6	
	3.8 x 3.8 x 1.5	6	154MHz-1000MHz		SR44M6	
	5.0 x 5.0 x 1.5	8	154MHz-1000MHz		SR55M8	
	5.0 x 3.5 x 1.4	4	154MHz-1000MHz		SR53M4	
	8.4 x 3.5 x 2.9	3	154MHz-1000MHz	* Stable performance * Environmental resistance, including high temperature resistance and impact resistance	SRD11	
	11.0 x 4.5 x 3.2	4	154MHz-1000MHz		SRF11	
	Φ9.15 X 3.15	3	154MHz-1000MHz		SRT039	

Ceramic Resonator & Filter & Discriminator

PHOTO	PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	ENVIRONMENTAL COMPLIANCE
	LxW[mm]	PINS				
	2.2x1.8 to 7.4x3.4	2	2MHz-60MHz	* High stability and adjustment-free * Small size SMD package	HCTA	* RoHS compliant by exemption
	2.2x1.8 to 7.4x3.4	3	2MHz-60MHz		HCTT	
	5.2x6.8 to 13.5x14.7	2	150KHz-1.5MHz	* High stability and adjustment-free	HCTB1	
	6.0 x 5.0 x 2.3 8.5 x 7.5 x 3.3	2	430KHz-1.25MHz	* High stability and adjustment-free * SMD package	HCTB2	
	6.5 x 6.0 x 4.0 8.0 x 8.0 x 7.0 9.5 x 6.3 x 6.5 11.0 x 8.0 x 7.0	3	455kHz	* Highly selective for narrowband communication * Compact structure and small size * Electrical performance is not affected * by external electromagnetic interference	HCCF1	
	6.5 x 6.0 x 4.0 6.5 x 11.9 x 3.0	4	450KHz-455kHz		* Suitable for matching with different ICs	
	DIP 6.0 x 6.3 x 3.0 SMD 6.0 x 6.2 x 3.1	3	455kHz	* Responsive and reliable performance * Standardized products, suitable for different dedicated circuits	HCCD1	
	SMD 3.7 x 3.1 x 1.4	2	10.7MHz	* Small size and light weight * Adjustment-free test circuit * High selectivity and good stability	HCCD2	

HCI Product Replacement Sheet

TUNING FORK KHz CRYSTAL UNITS

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDD*	ABRACO*	FO*
LxW(mm)	PINS										
1.6x1.0	2	32.768kHz	Tolerance(@25°C) ±10/±20/±30ppm Operating temperature -40~+85°C -40~+125°C Load capacitances 6, 7, 9, 12.5pF	FC11M2	FC1610AN	9HT12	NONE	NONE	GWX-1610	ABS05	FK16
2.0x1.2	2	32.768kHz		FC21M2	FC-12M	9HT11	XD2012	ETDG	GWX-2012	ABS06	FK125
3.2x1.5	2	32.768kHz		FC31M2	FC-135/FC-13A/FC3215AN	9HT10	XD3215	ETST	GSX-317	ABS07	FK135
7.0x1.5	4	32.768kHz	Tolerance(@25°C) ±20/±30ppm Operating temperature -20~70°C -40~+85°C Load capacitances 6, 7, 9, 12.5pF	FR07S4	MC-146	NONE	NONE	ETDE	NONE	NONE	FKFSXEIHM0.032768-T3
8.0x3.8	4	32.768kHz		FR08S4	MC-306	NONE	NONE	NONE	CC1A-T1A	ABS25	FKT38
ø2x6	2	32.768kHz		FL26T2	EOL	NONE	NONE	XB2060	NONE	GWX-26/GDX-1C/GCX-26	EOL
ø3x8	2	32.768kHz	FL38T2	EOL	NONE	NONE	XA3080	NONE	GCX-39	EOL	EOL

CRYSTAL

MHz CRYSTAL UNITS

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDD*	ABRACO*	FO*	
LxW(mm)	PINS											
1.2x1.0	4	26~52MHz	Tolerance(@25°C) ±10 to ±50ppm Stability over operating temperature ±10 to ±150ppm Operating temperature range(TYP) -10~+60°C -20~+70°C -40~+85°C -40~+105°C (Seam seal SMD type) -40~+125°C (Seam seal SMD type) Load capacitances 6~32pF or series Automotive Grade crystals per AEC-Q200 standard be available (Seam seal SMD type)	XC10M4	FA1210AN	8J	NONE	EUAB	GSX-113	NONE	NONE	
1.6x1.2	4	24~60MHz		XC11M4	FA-118T	9Q/8J	X3	ETSB	GRX-210 GSX-213	ABM12W	NONE	
2.0x1.6	4	20~60MHz		XC21M4	FA-128	8Y	XZ	E1SB	GRX-220 GSX-228	ABM11W	FC1BS	
2.5x2.0	4	12~60MHz		XC22M4	FA-20H	8Z	XY	E2SB	GRX-320 GSX-323	ABM10W	FC2BS	
3.2x2.5	4	8~60MHz		XC32M4	FA-238V/FA-238/TSX-3225	DX/7M	XX	E3SB	GRX-330	ASEMP	FC3BA	
5.0x3.2	4	8~55MHz		XC53M4	EOL	TB/EOL	XV	E5SB/EOL	GRX-530 CC2A-T1A	ASFLMP	FC5AQ	
6.0x3.5	4	7.5~55MHz		XC63M4	EOL	EOL	XR	EOL	GSX-6	ILCX08	FC6BS	
7.0x5.0	4	6~55MHz		XC75M4	EOL	EOL	EOL	EOL	GSX-2	ASVK	FC7BS	
5.0x3.2	2	8~55MHz		XC53G2	EOL	EOL	EOL	EOL	CC2A-T1A CC2A-T3A	ABM3	FC5AQ	
6.0x3.5	2	7.5~55MHz		XC63G2	EOL	EOL	EOL	EOL	EOL	ABM7	FC6AS	
11.0x4.6x13.5	2	1.8~150MHz		X49UT2	EOL	EOL	EOL	EOL	EOL	EOL	EOL	
11.0x4.6x3.5	2	3.2~64MHz		X49ST2	EOL	EOL	XI	EOL	EOL	EOL	EOL	
11.0x4.6x3.5	3	3.2~64MHz		X49ST3	EOL	EOL	EOL	EOL	EOL	HC49-3H HC49-4H	NONE	NONE
11.4x4.6x4.2	2	3.2~64MHz		X49SS2	EOL	EOL	XJ	EOL	EOL	GSX49-3 GSX-4	ABLS Series	NONE
11.4x4.6x4.2	3	3.2~64MHz		X49SS3	EOL	EOL	EOL	EOL	EOL	EOL	EOL	EOL
13.0x4.7x4.0	4	3.2~64MHz	X49SS4	EOL	EOL	EOL	EOL	EOL	EOL	EOL	EOL	

OSCILLATORS

HCMOS output OSCILLATORS in SMD ceramic seam seal packages

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDD*	ABRACO*	FO*
LxW(mm)	PINS										
1.6x1.2	4	32.768kHz 1~55MHz	Tight stability and highly reliable oscillators. Suitable for smallest applications. Over all stability from 25 to 100ppm available. Operating temperature ranges (TYP) -20~+70°C -40~+85°C -40~+125°C Supply voltages 1.8-5.0V	CO11H4	NONE	8R	NONE	NONE	NONE	NONE	F08HS
2.0x1.6	4	32.768kHz 1~60MHz		CO21H4	SG2016	8N	NONE	D1SX	GXO-22001	ASADV	FC1BS
2.5x2.0	4	32.768kHz 1~160MHz		CO22H4	SG-210STF/SG2520/ SG211	8W	OY-B	D2SX	GXO-3201 GXO-3232	ASDDV	FC2BS
3.2x2.5	4	32.768kHz 1~160MHz		CO32H4	SG3225 SG-310	7X	OX-B OA-U	D3SX	GFO-3301 GXO-3301	ASEMP	FC3BA
5.0x3.2	4	32.768kHz 1~160MHz		CO53H4	SG5032	7C/EOL	OW-U	D5SX/EOL	GXO-5300	AX5/ASFLMP	FC5AQ
7.0x5.0	4	32.768kHz 1~160MHz		CO75H4	SG7050	7W/EOL	OT-U	D7SX/EOL	GXO7500 GXO-U109 GXO-108	AX7	FC7BS
	6	150~250MHz		CO75H6	SG8002CA	EOL	NONE	EOL			

HCMOS output OSCILLATORS in DIP type packages (THRU-HOLE)

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDD*	ABRACO*	FO*
LxW(mm)	PINS										
DIP14(20x13)	4	32.768kHz 1~160MHz	Over all stability 25 to 100ppm available. Operating temperature ranges (TYP) -20~+70°C; -40~+85°C Supply voltages 1.8-5.0V	CD14H4	NONE	EOL	EOL	EOL	GXO-U101F/ GXO-100F/GXO-102F	ACO	NONE
DIP8(13x13)	4	32.768kHz 1~160MHz		CD08H4	NONE	EOL	EOL	EOL	GXO-U101H/ GXO-100H/GXO-1002H	ACHL	NONE

LVPECL output OSCILLATORS in SMD ceramic seam seal packages

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDDG*	ABRACO*	FO*
LxW(mm)	PINS										
2.5x2.0	6	10-250MHz	Over all stability 25 to 100ppm available. Operating temperature ranges (TYP) -20-+70°C -40-+85°C Supply voltages 2.5V and 3.3V.	CO22P6	SG2520E	EA	NONE	NONE	GXO-E21	ASG2-P	NONE
3.2x2.5	6	10-1500MHz		CO32P6	SG3225E	DA/DB/DC	OA-M LVPEVL	D3SP	GXO-E31	AX3PAF/AX3PBF	FO3PS
5.0x3.2	6	10-1500MHz		CO53P6	SG5032E	CC/CA/CB	OW-M LVPECL	D5SP-EOL	GXO-E51	AX5PAF/AX5PBF	FO5P
7.0x5.0	6	10-1500MHz		CO75P6	SG7050E	BA/BB/BC-EOL	OT-M/OD-M LVPECL	D7SP-EOL	GXO-E76/GXO-E71	AX7PAF/AX7PBF	FO7PS

LVDS output OSCILLATORS in SMD ceramic seam seal packages

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDDG*	ABRACO*	FO*
LxW(mm)	PINS										
2.5x2.0	6	10-250MHz	Over all stability 25 to 100ppm available. Operating temperature ranges (TYP) -20-+70°C -40-+85°C Supply voltages 1.8V, 2.5V and 3.3V.	CO22D6	SG2520V	EB	NONE	NONE	GXO-L21	ASD2-D	NONE
3.2x2.5	6	10-1500MHz		CO32D6	SG3225V	DE/DF	OA-M LVDS	D3ST	GXO-L31	AX3DAF/AX3DBF	FO3LS
5.0x3.2	6	10-1500MHz		CO53D6	SG5032V	CE/CF/CG-EOL	OW-M/OJ-M LVDS	D5ST	GXO-L51	AX5DAF/AX5DBF	FO5L
7.0x5.0	6	10-1500MHz		CO75D6	SG7050V	BE/BF/BG-EOL	OT-M/OD-M LVDS	D7ST	GXO-L76/GXO-L71	AX7DCF	FO7LS

HCSL output OSCILLATORS in SMD ceramic seam seal packages

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDDG*	ABRACO*	FO*
LxW(mm)	PINS										
2.5x2.0	6	10-250MHz	Over all stability 25 to 100ppm available. Operating temperature ranges (TYP) -20-+70°C -40-+85°C Supply voltages 1.8V, 2.5V and 3.3V.	CO22C6	NONE	EC	NONE	NONE	NONE	ASDMP	NONE
3.2x2.5	6	10-1500MHz		CO32C6	SG3225HBN	DH	NONE	D3SL	NONE	AX3HAF/AX3HBF	NONE
5.0x3.2	6	10-1500MHz		CO53C6	NONE	CX-EOL	OJ-M HCSL	D5SL-EOL	NONE	AX5HBF/AX5HCF	NONE
7.0x5.0	6	10-1500MHz		CO75C6	NONE	BX-EOL	OD-M/OD-P HCSL	D7SL-EOL	NONE	AX7HBF/AX7HCF	NONE

VCXO

HCMOS/LVPECL/LVDS/HCSL output VCXO

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDDG*	ABRACO*	FO*
LxW(mm)	PINS										
2.5x2.0	6	1.25-250MHz	Over all stability 25 to 100ppm available. Operating temperature ranges (TYP) -20-+70°C -40-+85°C Supply voltages 1.8V, 2.5V, 3.3V and 5V Frequency pull ranging ±50ppm, ±100ppm.	VC22H6 VC22P6 VC22D6	NONE	NONE	NONE	NONE	NONE	ASG2-P ASG2-D	NONE
3.2x2.5	6	1.25-1500MHz		VC32H6 VC32P6 VC32D6	VG3225C VG3225E VG3225V	DN/DJ/DR	VA-M	D3SV	GVXO-338 GVXO-E33 GVXO-L33	FY3H	NONE
5.0x3.2	6	1.25-1500MHz		VC53H6 VC53P6 VC53D6	VG5032C VG5032E VG5032V	CP/CK/CN/CJ/CR-EOL	VW-M/VJ-M	D5SV-EOL	GVXO-523 GVXO-533	FY5C	NONE
7.0x5.0	6	1.25-1500MHz		VC75H6 VC75P6 VC75D6	VG7050C VG7050E VG7050V	6U/BR/BJ/BK/BN/BB-EOL	VD-M/VT-M	D7SV-EOL	GVXO-753 GVXO-E76 GVXO-L76	ASC-C ASC-P ASC-D	NONE
14x9	6	40-150MHz		VC14H6 VC14P6 VC14D6	NONE	NONE	VLCU/VLEU	NONE	GVXO-27 GVXO-32 GVXO-34	ABLNO ABLGO	NONE
DIP14(20x13)	4	1.25-250MHz		VD14H4	NONE	NONE	NONE	NONE	GVXO-25 GVXO-41F	NONE	NONE
DIP8(13x13)	4	1.25-250MHz		VD08H4	NONE	NONE	NONE	NONE	GVXO-41H	NONE	NONE

TCXO/VCTCXO

Clipped sine wave output TCXO/VCTCXO in SMD packages

PACKAGE		FREQUENCY RANGE	PRODUCT FEATURES	HCI PN	EPSO*	TX*	Taitie*	HOSONI*	GOLLEDDG*	ABRACO*	FO*
LxW(mm)	PINS										
2.0x1.6	4	10-55MHz	Stability 0.5 to 2.5ppm available. Operating temperature ranges(TYP) -10-+60°C; -20-+70°C -30-+85°C; -40-+85°C Frequency tolerance 1 or 2ppm. Supply voltages 1.8V,2.5V,3.0V,3.3V. Low power consumption < 2mA available(Seam seal type). VCTCXO frequency pull ranging 0.5 to 5ppm(TYP). HCMOS output can be provided.(Please contact us).	TC21S4 UC21S4	TG2016SMN/TG2016S LN	7Z	TZ	NONE	GTXO-203	ATX-13 ASTX-13	FT1CN FT1GN
2.5x2.0	4	10-55MHz		TC22S4 UC22S4	TG2520SMN/TG5006C G	7L	TY/TY-J	NONE	GTXO-253	ASTX-H12 ASTX-12 ATX-12	FT2CN FOX251
3.2x2.5	4	10-50MHz		TC32S4 UC32S4	TG5006CE	7Q	TX/TX-J/TX-P	NONE	GTXO-91 GTXO-93	ASTX-H11 ASTX-11 ATX-11	FT3HN FT3CN FOX923
5.0x3.2	4	10-50MHz		TC53S4 UC53S4	TG5032SGN/TG5032S FN/TG5032SMN/TG5032CMN/TG5032CFN	7P/EOL	TL/TW	NONE	GTXO-83	AST3TQ53 I533	FT5SN FT5HN FOX924B
	4	10-52MHz		TR53S4 UR53S4	NONE	TV	NONE				
7.0x5.0	4	10-50MHz		TC75S4 UC75S4	TG7050SKN/TG7050S MN/TG7050CMN/TG7050CKN/TG5510CA/TG5511CA	7N/EOL	TA	NONE	GTXO-73 GTXO-74	AST3TQ	FT7SN FOX331
	4	10-52MHz	TR75S4 UR75S4	NONE	TT/TS	NONE					



体系认证

Quality System



质量管理体系认证证书

证书编号: 19819QF2974R15
统一社会信用代码/组织机构代码: 91320594301978547L

兹证明:
苏州杭晶电子科技有限公司
质量管理体系符合: GB/T19001-2016 idt ISO9001:2015
证书覆盖范围: 石英晶体谐振器及振荡器的生产与销售
注册地址: 苏州工业园区阳澄湖一街1号宏源科技园2幢201室
经营地址: 苏州吴中区郭巷委庄16路新象科技园3号

首次发证日期: 2019年05月03日
本次换证日期: 2022年06月14日
证书有效期至: 2025年06月02日





北京新纪源认证有限公司
地址: 北京市朝阳区南湖东园122楼7层北区A05(邮编:100102)



**CERTIFICATE OF QUALITY MANAGEMENT SYSTEM
CERTIFICATION**

Certificate No.: 19819QF2974R15
Unified Social Credit Code /Organization Code:91320594301978547L

We hereby certify that the organization:
Suzhou Hangjing Electronic Technology Co., LTD
is in conformity with Quality Management System Standard:
GB/T19001-2016 idt ISO9001:2015
The certificate is valid for the following product(s)/service:
Production and sales of quartz crystal resonator, and oscillator
Registration Address: Room 207, Building 2, CHENLEI Science Park, No.1 Qunyang Road, Suzhou Industrial Park
Business Address: No.3 Caijiabang Road, Group 16, Jiangzhuang, Guoxiang, Wuzhong District, Suzhou

Date of Initial Issuance: Jun 03, 2019
Date of Renewal: Jun 14, 2022
Date of Expiration: Jun 02, 2025





Issued By: *Li Jiyuan*

Beijing Xinjiyuan Certification Co.,Ltd.
Address:Room 805, North Area, 7th Floor, Building 122, Nanhu East Garden,
Chaoyang District, Beijing City, China (Post Code: 100102)



ENVIRONMENTAL COMPLIANCE OF PRODUCTS

RoHS & RoHS 2

- ◆ 所有产品符合RoHS标准
- ◆ 多数产品无铅
- ◆ 少数产品属于RoHS豁免(玻璃封装晶振, 包括音叉, 陶瓷谐振器及高端振荡器)
- ◆ All our products are RoHS compliant.
- ◆ Majority of products is LEAD-FREE.
- ◆ A very few products fall under RoHS exemption (glass seal crystal, certain tuning forks, ceramic resonators and high-end oscillators).

HF & PHs

- ◆ 多数产品无卤素
- ◆ 非故意使用邻苯二甲酸盐及聚氯乙烯
- ◆ Majority of products is HALOGEN-FREE.
- ◆ Phthalates and PVC are not intentionally used.

SVHCs per REACH

- ◆ 多数产品不含欧盟标准高度关注物质, 我们可以提供证明(MDS)
- ◆ 欧盟标准不断监督更新
- ◆ Majority of our products do not contain SVHCs listed by REACH, we can provide evidence (MDS).
- ◆ Continuously monitoring for updates by REACH.

QUALITY POLICY

High quality products exceeding the expectations of our customers.

Comprehensive and professional service for our customers.

Incorporated advanced quality systems and environmental compliance.

TECHNICAL SUPPORT

SALES SUPPORT

- ◆ 及时快速的技术与支持
- ◆ 擅长提供兼容性规格书
- ◆ 30年专业测试分析经验
- ◆ Engineering support to meet customer's demand.
- ◆ Many years of experience to cross and match customer's specifications.
- ◆ Engineering with up to over 30 years experience for professional testing and FA.

BOARD TESTING

- ◆ 准确频率匹配测试能力
- ◆ 执行测试振荡器负阻抗
- ◆ 提供专业电路改进建议
- ◆ Capability of frequency matching test.
- ◆ Tests for oscillation circuit's negative resistance and circuit margin can be performed.
- ◆ **We are capable to provide professional circuit improvement suggestions if this is necessary.**

TEST EQUIPMENT

- ◆ 专业的高端测试设备
- ◆ 晶振阻抗表250B高端频谱分析仪器
- ◆ 有源探头和电流探针
- ◆ Professional high end test equipment is accessible to perform tests required.
- ◆ Crystal Impedance Meters 250B, Analyzers and other equipment from Agilent / HP.
- ◆ Active probes and current probe (Textroics).

CUSTOMER RELATIONS MANAGEMENT – CRM

SALES

- ◆ 快速响应客户需求
- ◆ 优势合理公平报价
- ◆ 快速简单送样流程
- ◆ 关注发展期待双赢
- ◆ Fast response to customer's demands.
- ◆ Competitive and fair pricing.
- ◆ Fast and uncomplicated sampling.
- ◆ Strong focus on win-to-win and fair business.

SERVICE

- ◆ 按时按量交货
- ◆ 灵活调度交期
- ◆ 经验设计团队
- ◆ 专业测试分析
- ◆ On time delivery of the goods.
- ◆ Flexible pull in and push out of orders.
- ◆ Experienced engineering and design in.
- ◆ Professional board testing and analysis.

QUALITY

- ◆ 产品超越客户期盼
- ◆ 不良率低于DPPM
- ◆ 快速专业8D报告
- ◆ 不妥协环境规则
- ◆ Products to exceed the customer's expectations.
- ◆ Provide all lots with very low DPPM rates.
- ◆ Fast and professional reporting in 8D format.
- ◆ Intransigent environmental compliance rules.

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