



TAITIEN

**QUARTZ CRYSTAL
CRYSTAL OSCILLATOR
VCXO
VCTCXO / TCXO
OCXO
TIMING MODULE**



TAIWAN
EXCELLENCE
2006



Our Performance, Your Reputation

Our Products

OCXO
0.06-200ppb

TCXO
0.1-2ppm

**Crystal Oscillators/
VCXO**
25-100ppm

Crystal Units
10-100ppm



Marine communication
Aerial radio
Satellite
Small cell

- **VCXO, TCXO**
- **X'TAL, TCXO**
- **OCXO**
- **TCXO, OCXO**



Car (ICE/IVI)
GPS
RKE, TPMS
ADAS

- **X'TAL, XO, TCXO**
- **X'TAL, TCXO**
- **X'TAL**
- **X'TAL, XO**



Watch
DSC
Mobile phone
HiFi, HD video

- **Tuning Fork**
- **X'TAL, XO**
- **X'TAL, TCXO**
- **X'TAL, XO**



Personal Computer
Scanner
Satellite TV
Radio
DVD player
FAX
Cordless telephone
ADSL
3G, 4G/LTE
High Speed Network
Base Station

- **X'TAL, XO**
- **X'TAL, XO**
- **X'TAL, TCXO**
- **X'TAL, TCXO**
- **X'TAL, XO**
- **X'TAL, TCXO, OCXO**
- **X'TAL**
- **X'TAL, XO**
- **TCXO, OCXO**
- **XO, VCXO**
- **VCXO, TCXO, OCXO**



Maintain sustainable competitive advantage from the satisfaction of customers, shareholders and employees

Taitien Electronics, a Quartz Frequency Control Product (FCP) solution provider, started its first production run of Tuning Fork Crystal in 1976. Our main products include XTAL, OSC, VCXO, TCXO, and is the only manufacturer in Taiwan that provides the technique of OCXO and inverted mesa (Qmesa) quartz resonator. Taitien service is capable of addressing one-stop procurement for all FCP requirements.

Our missions are:

- 1 Provide our customers with quality Frequency Control Products at competitive price.
- 2 Create knowledge from the integration of information technology and educational training.
- 3 Maintain our quality through continuous improvement; challenge the goal of zero defects.
- 4 Focus product innovation on our core technology.
- 5 To be a world-class Frequency Control Products solution provider, building network of strategic alliances with quality resources to maintain our market competitiveness.

Crystal Units

TYPE		PACKAGE	FREQ. RANGE	FEATURE
NEW X3		1.6 x 1.2 x 0.35mm Ceramic SMD Package	24MHz ~ 54MHz	- Tight Tolerance - Ultra Low Profile
NEW XZ		2.05 x 1.65 x 0.45mm Ceramic SMD Package	16MHz~60MHz	- AEC-Q200 Ready - Smaller Size - Tight Tolerance
HOT XY		2.5 x 2.0 x 0.45mm Ceramic SMD Package	12MHz~54MHz	- Smaller Size - Tight Tolerance
HOT XX		3.2 x 2.5 x 0.7mm Ceramic SMD Package	12MHz~60MHz	- AEC-Q200 qualified - Tight Tolerance
X2		3.2 x 2.5 x 0.75mm Ceramic SMD package Glass Seal	12MHz~48MHz	Full Ceramic Package
XV		5.0 x 3.2 x 0.8mm Ceramic SMD Package	8MHz~80MHz	- AEC-Q200 qualified - Tight Tolerance
XS		5.0 x 3.2 x 1.2mm Ceramic SMD Package Glass Seal	8MHz~54MHz	- AEC-Q200 qualified - Full Ceramic Package
XR		6.0 x 3.5 x 1.0mm Ceramic SMD Package	8MHz~50MHz	- AEC-Q200 Ready - Tight Tolerance
XQ		8.0 x 4.5 x 1.4mm Ceramic SMD Package Glass Seal	7.3728MHz~70MHz	- AEC-Q200 qualified - Full Ceramic Package
XI		10.8 x 4.5 x 3.4mm Metal Can Through Hole Package	3.58MHz~80MHz	- AEC-Q200 qualified - Standard Footprint - Low Profile For Close PCB Stacking
XJ		12.5 x 4.5 x 4.0mm Metal Can SMD Package	3.58MHz~80MHz	Metal Can SMD Package

Tuning Fork Crystal Units

TYPE		PACKAGE	FREQ. RANGE	FEATURE
NEW XB		1.0 x 4.6mm 2.0 x 6.0mm Through Hole Package	32.768kHz	Watch Crystal
XA		3.0 x 8.0mm Through Hole Package	32.768kHz	Watch Crystal
HOT XD		2.0 x 1.2 x 0.6mm 3.2 x 1.5 x 0.9mm 4.1 x 1.5 x 0.9mm Ceramic SMD Package	32.768kHz	- AEC-Q200 qualified - Low Profile SMD Watch Crystal
XN		6.9 x 1.4mm 8.0 x 3.8mm Plastic SMD Package	32.768kHz	SMD Watch Crystal

Crystal Oscillators (CMOS Output)

TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
NEW OZ	 2.05 x 1.65 x 0.75mm Ceramic SMD Package	1.5MHz~50MHz	CMOS	• Ultra-compact and light • Low Jitter • Low Standby Current
HOT OY	 2.5 x 2.0 x 0.85mm Ceramic SMD Package	32.768kHz~125MHz	CMOS	• Smaller Size • AEC-Q200 Ready • Low Jitter • Low Standby Current • Operating Temp. Up To 125°C • Enhanced Stability Support
HOT OX	 3.2 x 2.5 x 0.95mm Ceramic SMD Package	32.768kHz~125MHz	CMOS	• Low Jitter • AEC-Q200 qualified • Low Standby Current • Operating Temp. Up To 125°C • Enhanced Stability Support
OV	 5.0 x 3.2 x 1.2mm Ceramic SMD Package	13.7kHz~160MHz	CMOS	• AEC-Q200 Ready • Low Jitter • Low Standby Current
OC	 7.0 x 5.0 x 1.3mm Ceramic SMD Package	13.7kHz~166MHz	CMOS	• Low Jitter • Low Standby Current
OC-M	 7.0 x 5.0 x 1.3mm Ceramic SMD Package	2.048MHz~200MHz	CMOS	• Up To 200MHz

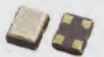
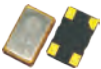
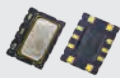
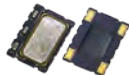
Programmable Crystal Oscillators

TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
HOT PY	 2.5 x 2.0 x 0.85mm Ceramic SMD Package	2.048MHz~200MHz	CMOS	• Smaller Size • Fast Delivery • Custom Freq. from 2.048 to 200MHz • Low Standby Current
HOT PX	 3.2 x 2.5 x 0.95mm Ceramic SMD Package	2.048MHz~200MHz	CMOS	• Fast Delivery • Custom Freq. from 2.048 to 200MHz • Low Standby Current

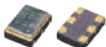
Crystal Oscillators (LVPECL/LVDS/HCSL Output)

TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
NEW OA	 3.2 x 2.5 x 0.9mm Ceramic SMD Package	10MHz~250MHz 90Mz ~125MHz	LVPECL / LVDS HCSL	• Very Low Jitter • Differential Logic • Up To 250MHz
NEW OW	 5.0 x 3.2 x 1.25mm Ceramic SMD Package	10MHz ~320MHz 90Mz ~125MHz	LVPECL / LVDS HCSL	• Very Low Jitter • Differential Logic • Up To 320MHz
HOT OW-M	 5.0 x 3.2 x 1.25mm Ceramic SMD Package	10MHz~1.5GHz	LVPECL / LVDS	• Low Jitter • Differential Logic • Up To 1.5GHz
HOT OT	 7.0 x 5.0 x 1.45mm Ceramic SMD Package	10MHz ~320MHz 90MHz ~125MHz	LVPECL / LVDS HCSL	• Very Low Jitter • Differential Logic • Up To 320MHz
HOT OT-M	 7.0 x 5.0 x 1.75mm Ceramic SMD Package	10MHz~1.5GHz	LVPECL / LVDS	• Low Jitter • Differential Logic • Up To 1.5GHz
NEW OT-U Ultra Low Jitter	 7.0 x 5.0 x 1.45mm Ceramic SMD Package	70~170MHz	LVPECL	• RMS Phase Jitter < 0.1ps, from 12kHz to 20MHz • Differential Logic

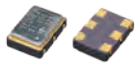
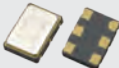
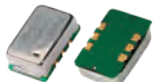
Voltage Controlled Temperature Compensated Crystal Oscillators

TYPE		PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
NEW TZ		2.0 x 1.6 x 0.8mm Ceramic SMD Package	10MHz~52MHz	Clipped Sine Wave	• Miniature SMD type • Low Power Consumption • VCTCXO Available
HOT TY		2.5 x 2.0 x 0.7mm Ceramic SMD Package	10MHz~52MHz	Clipped Sine Wave	• Smaller Size • Low Power Consumption • VCTCXO Available
NEW TY-J		2.5 x 2.0 x 0.85mm Ceramic SMD Package	9.5MHz~60MHz	CMOS	• Low Power Consumption
HOT TX		3.2 x 2.5 x 0.9mm Ceramic SMD Package	10MHz~52MHz	Clipped Sine Wave	• Low Power Consumption • VCTCXO Available
NEW TX-J		3.2 x 2.5 x 0.95mm Ceramic SMD Package	9.5MHz~60MHz	CMOS	• Low Power Consumption
HOT TW High Precision		5.0 x 3.2 x 1.55mm Ceramic SMD Package	10MHz~52MHz	CMOS / Clipped Sine Wave	• High Precision For -20°C~+70°C, ±0.1ppm -40°C~+85°C, ±0.2ppm
HOT TS High Precision		7.0 x 5.0 x 1.9mm Ceramic SMD Package	5MHz~40MHz	CMOS / Clipped Sine Wave	• High Precision For -20°C~+70°C, ±0.1ppm -40°C~+85°C, ±0.2ppm
HOT TT Stratum3		7.0 x 5.0 x 1.9mm Ceramic SMD Package	5MHz~52MHz	CMOS / Clipped Sine Wave	• Overall ±4.6ppm Including 20 Years Aging(@ -40°C~+85°C)
HOT TA		7.0 x 5.0 x 1.9mm Ceramic SMD Package	5MHz~52MHz	CMOS / Clipped Sine Wave	• Low Power Consumption • VCTCXO Available
TK		14.3 x 8.7 x 4.9mm Metal Cover, FR-4 PCB Based SMD Package	5MHz~40MHz	CMOS / Clipped Sine Wave	• FR-4 PCB Based • Low Current Option • VCTCXO Available
TF		20.4 x 12.8 x 7.8mm Metal Can Through Hole Package	1.25MHz~52MHz	CMOS / Clipped Sine Wave	• Standard DIP 14 Pin • VCTCXO Available

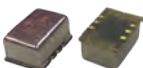
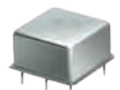
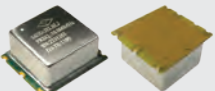
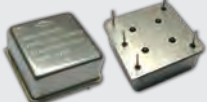
Voltage Controlled Crystal Oscillators (CMOS/Sine Wave Output)

TYPE		PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
NEW VW		5.0 x 3.2 x 1.25mm Ceramic SMD Package	1.5MHz~170MHz	CMOS	• Smaller Size • Tight Symmetry • Low Jitter
HOT VT		7.0 x 5.0 x 1.75mm Ceramic SMD Package	1.5MHz~170MHz	CMOS	• Tight Symmetry • Low Jitter
VT-M		7.0 x 5.0 x 1.75mm Ceramic SMD Package	10MHz~250MHz	CMOS	• Up to 250MHz
NEW VLCU		14.0 x 9.0 x 5.5mm Metal Can SMD Package	50MHz~125MHz	Sine Wave	• Ultra Low Phase Noise • Low Power Consumption

Voltage Controlled Crystal Oscillators (LVPECL/LVDS Output)

TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
NEW VW 	5.0 x 3.2 x 1.25mm Ceramic SMD Package	30MHz~250MHz	LVPECL / LVDS	• Smaller Size • Tight Symmetry • Differential Logic • Very Low Jitter
HOT VT 	7.0 x 5.0 x 1.75mm Ceramic SMD Package	1.5MHz~200MHz	LVPECL / LVDS	• Tight Symmetry • Wide Pulling Range • Differential Logic • Very Low Jitter
VT-M 	7.0 x 5.0 x 1.75mm Ceramic SMD Package	10MHz~1.5GHz	LVPECL / LVDS	• Tight Symmetry • Wide Pulling Range • Differential Logic • Up to 1.5GHz • Low Jitter
VK 	14.2 x 9.3 x 5.4mm Metal Cover, FR-4 PCB Based SMD Package	30MHz~250MHz	LVPECL / LVDS	• FR-4 PCB Based • Differential Logic

Oven Controlled Crystal Oscillators

TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
HOT NK-N 	14.3 x 9.3 x 6.5mm Metal Can SMD Package	10MHz~40MHz	CMOS	• Low Power Consumption • Overall ± 4.6ppm Including 20 Years Aging • Fast Warm-Up
HOT NF 	20.3 x 12.7 x 11.0mm Metal Can Through Hole Package	5MHz~40MHz	CMOS	• AT or SC Cut Crystal • Standard DIP 14 Pin • Excellent Stability • SMD Optional • NF-25MHz-2050 series (Fast Delivery: 1 week, Quantity <= 20pcs)
HOT NA 	25.4 x 25.4 x 12.7mm Metal Can Through Hole Package	5MHz~100MHz	LVTTTL / Sine Wave	• SC-CUT Crystal • High Stability • Low Phase Noise • Fast Warm-Up • NA-10MHz-2000/ NA-10MHz-2500 Series (Fast Delivery: 1 week, Quantity <= 20pcs)
NJ 	25.4 x 22.1 x 11.0mm Metal Can SMD Package	5MHz~100MHz	CMOS / Sine Wave	• SC or AT Cut Crystal • High Stability • Low Phase Noise • Fast Warm-Up
HOT NI 	36.3 x 27.2 x 12.7mm Metal Can Through Hole Package	5MHz~100MHz	LVTTTL / Sine Wave	• SC-CUT Crystal • High Stability • Stratum 3E compliant • Up To -110dBc @ 1Hz • NI-10MHz-2400/NI-10MHz-2500/ NI-100MHz-2900 Series (Fast Delivery: 1 week, Quantity <= 20pcs)
NP 	20.6 x 20.6 x 11.0mm Metal Can Through Hole Package	5MHz~40MHz	CMOS	• SC or AT Cut Crystal • Stratum 3E compliant • High Stability • Up To -110dBc @ 1Hz

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