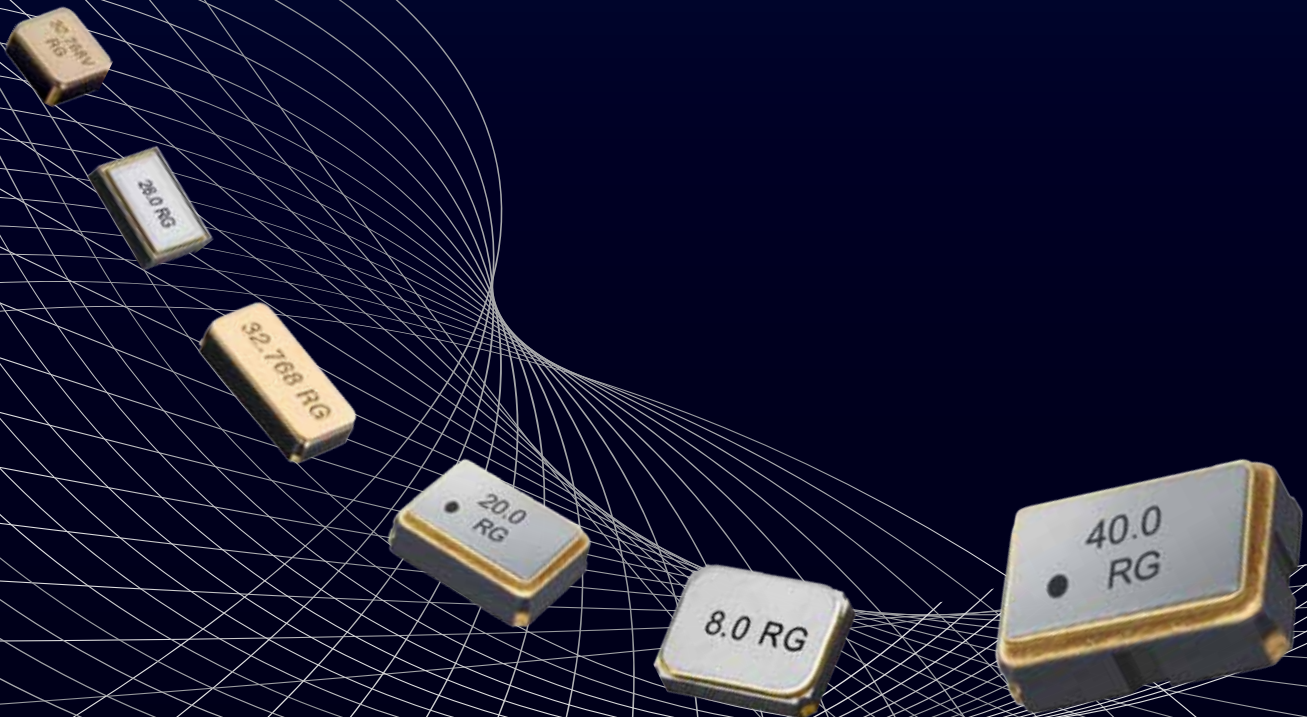




Your Solution for Quartz Crystals and Oscillators



Produktübersicht
Product Overview
Présentation du produit

Producer for Quartz Crystals and Oscillators



GEYER Electronic GmbH, gegründet 1964, ist ein führender Hersteller von Schwingquarzen und Oszillatoren mit Produktionsstätten im asiatischen Raum. Ein globales Vertriebsnetzwerk garantiert unseren Kunden weltweite Verfügbarkeiten unserer Produkte, sowie kurze Lieferzeiten.

Wir bieten:

- Eine hohe Lagerkapazität
- Kostenlose Musterbauteile
- Liefersicherheit über die gesamte Projektzeit
- Realisierbare Lieferzeiten und kostenoptimierte Preise
- Kanban und Ship to Stock Systeme
- Sicherheitslager auf Kundenwunsch
- Langzeitverfügbarkeiten
- Zertifizierungen nach ISO9001 und AEC-Q200 

GEYER Electronic GmbH, founded in 1964, is a leading manufacturer of oscillating crystals and oscillators with Production in Asia. A global distribution network guarantees our customers worldwide availability of our products and short delivery times.

We offer:

- High storage capacity
- Free sample
- Security of supply over the entire project period
- Realizable delivery times and cost-effective prices
- Global customer-oriented logistics concepts like Kanban or Just in time
- Safety stock to customer
- Long term guarantee of delivery
- Certified according to DIN ISO9001 and AEC-Q200 

GEYER Electronic GmbH, fondé en 1964, est devenu un fabricant de premier plan de quartz et d'oscillateurs, avec des sites de production en Asie. Un réseau global de commercialisation nous permet de garantir des délais de livraisons courts et la disponibilité de nos produits à nos clients.

Nous proposons:

- Grandes capacités de stockage
- Echantillons gratuits
- Sécurité d'approvisionnement pour la durée totale de votre projet
- Délais de livraisons réalistes et des articles aux meilleurs prix
- Livraisons KANBAN et Ship To Stock
- Stock de sécurité sur demande
- Disponibilité des produits pour une longue durée
- Certifications ISO9001 et AEC-Q200 



SMD Uhrenquarze - Tuning Fork Crystals



	Type	avail.	size mm	temp. range max.	freq. stability	freq. range
	KX-327VT		1.25 1.05 0.5	-40° ... +85°C	±20 ppm	32.768 kHz
	KX-327FT		1.6 1.0 0.5	-40° ... +85°C	±10 ... ±20 ppm	32.768 kHz
	KX-327RT(S)		2.0 1.2 0.6 (0.35)	-40° ... +85°C	±10 ... ±20 ppm	32.768 kHz
	KX-327RF		2.0 1.2 0.6	-40° ... +125°C	±10 ... ±20 ppm	32.768 kHz
	KX-327NHT		3.2 1.5 0.8	-40° ... +85°C	±5 ... ±20 ppm	32.768 kHz
	KX-327NHF		3.2 1.5 0.8	-40° ... +125°C	±10 ... ±20 ppm	32.768 kHz
	KX-327XS		4.95 1.8 0.96	-40° ... +85°C*	±20 ... ±30 ppm	32.768 kHz
	KX-327L		7.0 1.5 1.4	-40° ... +85°C*	±5 ... ±20 ppm	32.768 kHz
	KX-327S		8.2 3.8 2.5	-40° ... +85°C*	±5 ±20 ppm	32.768 kHz

SMD Schwingquarze - Quartz Crystals

	Type	avail.	size mm	temp. range max.	freq. stability	freq. range
	KX-3T		1.2 1.0 0.3	-40° ... +85°C	±10 ... ±50 ppm	26 ... 60 MHz
	KX-4		1.6 1.2 0.3	-40° ... +125°C*	±10 ... ±50 ppm	24 ... 80 MHz
	KX-5		2.0 1.6 0.45	-40° ... +125°C*	±10 ... ±50 ppm	16 ... 80 MHz
	KX-6		2.5 2.0 0.55	-40° ... +125°C*	±10 ... ±50 ppm	12 ... 80 MHz
	KX-7		3.2 2.5 0.8	-40° ... +125°C*	±10 ... ±50 ppm	8 ... 66 MHz
	KX-9A		5.0 3.2 1.0	-40° ... +105°C*	±10 ... ±50 ppm	7.680 ... 300 MHz
	KX-9B		5.0 3.2 1.1	-40° ... +105°C*	±10 ... ±50 ppm	8 ... 50 MHz
	KX-12A		6.0 3.5 1.1	-40° ... +125°C*	±10 ... ±50 ppm	8 ... 150 MHz
	KX-12B		6.0 3.5 1.0	-40° ... +125°C*	±10 ... ±50 ppm	8 ... 50 MHz
	KX-13		7.0 5.0 1.3	-40° ... +125°C*	±10 ... ±50 ppm	6 ... 160 MHz
	KX-14		8.0 4.5 1.6	-40° ... +105°C*	±50 ppm	4 ... 60 MHz
	KX-20		11.6 5.5 1.6	-40° ... +105°C*	±50 ppm	3.579545 ... 25 MHz
	KX-K(S)		12.3 4.5 4.2 (3.2)	-40° ... +85°C*	±10 ... ±50 ppm	3.5 ... 70 MHz
	KX-C		12.5 4.6 3.7	-40° ... +105°C*	±30 ... ±50 ppm	3.5 ... 24 MHz

THT Crystals

	Type	size mm	temp. range max.	freq. stability	freq. range
	KX-26	6.2 Ø 2	-40° ... +85°C*	±30 ppm	32.768 kHz
	KX-38	8.0 Ø 3	-40° ... +85°C*	±20 ppm	
	KX-49	11.3 4.9 13.6	-40° ... +105°C*	±5 ... ±50 ppm	1.843 ... 200 MHz
	KX-3H	11.35 4.65 3.6	-40° ... +105°C*	±10 ... ±30 ppm	3.2 ... 70 MHz

* Stand. temp. Range -20° ... +70°C available

Oszillatoren - Clock Oscillators



	Type	avail.	size mm	temp. range max.	freq. stability	freq. range
	KXO-56T SSO		5.0 3.2 1.2	-40° ... +85°C	±20 ppm ... ±100 ppm	13 ... 160 MHz
	KXO-V93T		1.6 1.2 0.6	-40° ... +85°C*	±30 ppm ... ±50 ppm	1 ... 80 MHz
	KXO-V94		2.0 1.6 0.8	-40° ... +85°C*	±25 ppm ... ±100 ppm	32.768 kHz 1 ... 100 MHz
	KXO-V95		2.5 2.0 0.82	-40° ... +125°C*	±25 ppm ... ±100 ppm	32.768 kHz 1 ... 70 MHz
	KXO-V32T		3.2 1.5 0.9	-40° ... +85°C	±10 ppm ... ±20 ppm	32.768 kHz
	KXO-V96		3.2 2.5 1.2	-40° ... +125°C*	±50 ppm ... ±120 ppm	32.768 kHz 1 ... 133 MHz
	KXO-V99		5.0 3.2 1.2	-40° ... +105°C*	±50 ppm ... ±120 ppm	32.768 kHz 1 ... 200 MHz
	KXO-V97		7.0 5.08 1.3	-40° ... +105°C*	±50 ppm ... ±120 ppm	32.768 kHz 1 ... 160 MHz
	KXO-97**		7.0 5.08 1.3	-40° ... +105°C*	±50 ppm ... ±120 ppm	32.768 kHz 1 ... 100 MHz
	DIL 14 KXO-200/400		20.8 13.2 5.08	-40° ... +85°C*	±25 ppm ... ±100 ppm	0.5 ... 100 MHz
	DIL 8 KXO-210/410		13.2 13.2 6.0	-40° ... +85°C*	±25 ppm ... ±100 ppm	0.5 ... 100 MHz
VCXO						
	KXO-70		3.2 2.5 1.2	-40° ... +85°C*	±50 ppm	2 ... 80 MHz
	KXO-70R		3.2 2.5 1.2	-40° ... +85°C*	±50 ppm	2 ... 80 MHz
	KXO-72		5.0 3.2 1.3	-40° ... +85°C*	±50 ppm ... ±100 ppm	1 ... 80 MHz
	KXO-72R		5.0 3.2 1.3	-40° ... +85°C*	±50 ppm ... ±100 ppm	1 ... 80 MHz
	KXO-75		7.0 5.0 1.7	-40° ... +85°C*	±10 ppm ... ±50 ppm	1.544 ... 77.760 MHz
	KXO-75R		7.0 5.0 1.7	-40° ... +85°C*	±10 ppm ... ±50 ppm	1.544 ... 77.760 MHz
VCTCXO						
	KXO-81 sinewave		2.0 1.6 0.7	-40° ... +75°C	±0.5 ppm ... ±2.0 ppm	13 ... 52 MHz
	KXO-86 sinewave		2.5 2.0 0.7	-30° ... +75°C	±0.5 ppm ... ±2.5 ppm	13 ... 56 MHz
	KXO-84 sinewave		3.2 2.5 1.0	-30° ... +75°C	±2.5 ppm	10 ... 40 MHz
	KXO-84 HCMOS		3.2 2.5 1.0	-40° ... +85°C	±1.0 ppm	8 ... 40 MHz
	KXO-83 sinewave		5.0 3.2 1.5	-40° ... +85°C*	±1.5 ppm ... ±2.5 ppm	6 ... 40 MHz
	KXO-82 sinewave		7.0 5.0 2.4	-30° ... +80°C	±2.0 ppm	12.6 ... 20 MHz
TCXO						
	KXO-88 sinewave		1.6 1.2 0.6	-40° ... +85°C	±1.0 ppm ... ±2.5 ppm	13 ... 52 MHz
	KXO-81 sinewave		2.0 1.6 0.7	-40° ... +85°C	±0.5 ppm ... ±2.5 ppm	13 ... 52 MHz

	Type	size mm	temp. range max.	freq. stability	freq. range
	KXO-86 sinewave	2.5 2.0 0.7	-40° ... +75°C	±1.0 ppm ... ±2.5 ppm	13 ... 56 MHz
	KXO-86 HCMOS	2.5 2.0 0.7	-40° ... +75°C	±2.5 ppm ... ±5.0 ppm	13 ... 54 MHz
	KXO-84 sinewave	3.2 2.5 1.0	-40° ... +75°C	±0.5 ppm ... ±2.5 ppm	13 ... 52 MHz
	KXO-84 HCMOS	3.2 2.5 1.0	-30° ... +75°C	±2.5 ppm	9.5 ... 60 MHz
	KXO-83 sinewave	5.0 3.2 1.5	-40° ... +85°C*	±1.0 ppm ... ±2.5 ppm	6 ... 40 MHz
	KXO-83 HCMOS	5.0 3.2 1.5	-40° ... +85°C*	±1.0 ppm ... ±2.5 ppm	6 ... 40 MHz
	KXO-82 sinewave	7.0 5.0 2.4	-30° ... +80°C	±2.0 ppm	10 ... 30 MHz
	KXO-82 HCMOS	7.0 5.0 2.4	-40° ... +85°C*	±1.0 ppm ... ±3 ppm	10 ... 30 MHz
LVDS					
	KXO-V64	3.2 2.5 1.0	-40° ... +85°C*	±20 ppm ... ±100 ppm	10 ... 1500 MHz
	KXO-V66	5.0 3.2 1.2	-40° ... +85°C*	±25 ppm ... ±100 ppm	40 ... 600 MHz
	KXO-V62 VCXO	5.0 3.2 1.2	-40° ... +85°C*	±25 ppm ... ±50 ppm	20 ... 700 MHz
	KXO-V65	7.0 5.0 1.7	-40° ... +85°C*	±50 ppm ... ±100 ppm	19.44 ... 700 MHz
	KXO-V63 VCXO	7.0 5.0 1.7	-40° ... +85°C*	±25 ppm ... ±100 ppm	20 ... 700 MHz
PECL					
	KXO-68	5.0 3.2 1.2	-40° ... +85°C*	±25 ppm ... ±100 ppm	25 ... 180 MHz
	KXO-67	7.0 5.0 1.7	-40° ... +85°C*	±25 ppm ... ±100 ppm	50 ... 212.50 MHz
VCO					
	KXO-59	12.7 12.7 2.8 8.0 6.0 1.8	-40° ... +85°C*		310 MHz ... 5.0 GHz

Resonatoren - Ceramic Resonators

	Type	size mm	temp. range max.	freq. stability	freq. range
	KX-ZTT CW	1.9 2.4 1.5	-40° ... +85°C	±0.2%	20 ... 50 MHz
	KX-ZTT CE	3.2 1.3 1.0	-25° ... +85°C	±0.2%	8 ... 12 MHz
	KX-ZTT CV	3.1 3.7 1.0	-20° ... +80°C	±0.3%	8 ... 50 MHz
	KX-ZTT CR	4.5 2.0 1.2	-40° ... +125°C	±0.2 ... 0.4%	4 ... 12 MHz
	KX-ZTT CS	4.1 4.7 1.6	-40° ... +85°C	±0.3%	8 ... 50 MHz
	KX-ZTT CP	6.0 3.0 1.8	-40° ... +125°C	±0.2 ... 0.4%	1.84 ... 12 MHz

* Stand. Temp. Range -20° ... +70°C available

** Input Voltage 5V

Weitere Bauteile und Spezifikationen auf Anfrage erhältlich.
Other components and specifications available on request.
D'autres composants et les spécifications sont disponibles sur demande.

Design- und Testcenter

Auswahl von Bauteilen

Schaltungsbegutachtung

Messungen und Analysen von Baugruppen

Wir bieten einen weltweit außergewöhnlichen Service:

- Ausführliche Beratung
- Validierung Ihrer Schaltung
- Ausgemessene Muster für Vorserien und Prototypen
- Abgestimmte Spezifikationen und Baugrößen
- 3D Modelle und EDA Files unserer Bauteile zur Erleichterung des Design-in
- Kostenlose Simulations - App
- Test der fertigen Baugruppe auf verschiedenste Parameter

Ihre Vorteile:

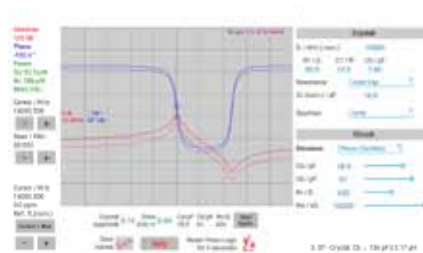
- Vermeidung von Unsicherheiten bei der Bauteileauswahl oder Spezifikation
- Verkürzte Entwicklungsdauer
- Erhöhte Betriebssicherheit in der Serie
- Kostenoptimierte Bauteileauswahl
- Optimale Lebenserwartung in der Serie

Sie erhalten:

- Ausführliche Beratung zum Schaltungsdesign neuer Schaltungen

Unter den Gesichtspunkten von:

- Frequenzgenauigkeit von unterschiedlichen Versorgungsspannungen
- Frequenzgenauigkeit über den Arbeitstemperaturbereich
- Anschwingverhalten bei verschiedenen Temperaturen
- Anschwingsicherheit
- Stromverbrauch
- Layout Optimierung
- Auswahl kostengünstiger Bauteile



Design and Test Center

Part selection

Evaluation of Circuit Design

Measurements and Analysis of PCBs

We offer your Design Engineers an exceptional worldwide service:

- Comprehensive consulting
- Validation of your design
- Our own Design and Test center
- Selected samples for prototypes and pilot series
- Matched specifications and design sizes
- 3D models and EDA files of our components for easy design-in
- Free Geyer App-Y-Quartz with analyzing tool
- Testing of boards on selected parameters

Your benefits:

- Prevention from incorrect decisions in component selection or specification
- Shorter development time
- Enhanced reliability of operation in production run
- Cost-optimized component selection
- Optimum design life in production run

You get:

- Comprehensive advice in design of new circuits

With regard to:

- Frequency deviation at different supply voltages
- Frequency deviation at different temperatures
- Start-up at different temperatures
- Start allowance
- Current consumption
- Layout optimizing
- Selection of economic components

Laboratoire de Design et de Tests

Choix de composants

Évaluation de circuits

Analyse et mesure des cartes

Pour vos développeurs/ingénieurs, nous offrons un service unique à travers le monde:

- Conseils et soutiens de nos ingénieurs
- Validation de votre circuit
- Échantillons pour pré-séries et prototypes
- Spécifications et tailles définies
- Modèles 3D et EDA files de nos composants pour faciliter le design-in
- Simulations gratuites grâce à notre application
- Tests de différents paramètres de vos circuits finis

Votre bénéfice:

- Éviter des erreurs lors du choix du composant et de ses spécifications
- Réduction du temps de développement et de conception
- Amélioration de la sécurité de fonctionnement lors de la production en série
- Optimisation des coûts pour chaque composant
- Durée de vie optimale lors de la production en série

Nous vous offrons des conseils détaillés pour le design de nouveaux circuits, à travers:

- Exactitude de la fréquence pour la tension d'alimentation
- Exactitude de la fréquence par rapport à la plage de température
- Comportement de l'oscillation au démarrage pour différentes températures
- Sécurité du comportement d'oscillation au démarrage
- Consommation de courant
- Optimisation de Layout
- Choix de composants aux meilleurs prix

Your Solution for Frequency Control Products

Tuning Fork Crystals

 1.25 1.05 0.5 KX-327VT	 1.6 1.0 0.5 KX-327FT	 2.0 1.2 0.6 KX-327RT/RF
 3.2 1.5 0.8 KX-327NHT/NHF	 4.95 1.82 0.96 KX-327XS	 7.0 1.5 1.4 KX-327L
 8.2 3.8 2.5 KX-327S		

Quartz Crystals

 1.2 1.0 0.3 KX-3T	 1.6 1.2 0.3 KX-4	 2.0 1.6 0.45 KX-5	 2.5 2.0 0.55 KX-6
 3.2 2.5 0.8 KX-7	 5.0 3.2 1.0 KX-9A/-9B	 6.0 3.5 1.1 KX-12A/-12B	
 7.0 5.0 1.3 KX-13	 12.3 4.5 4.2; 3.2 KX-K/KX-KS	 12.5 4.6 3.7 KX-C	

Clock Oscillators

 1.6 1.2 0.6 KXO-V93T	 2.0 1.6 0.8 KXO-V94/KXO-81	 2.5 2.0 0.82 KXO-V95/KXO-86	 3.2 2.5 1.2 KXO-V96
 3.2 1.5 0.9 KXO-V32T	 5.0 3.2 1.2 KXO-V99/KXO-56T	 7.0 5.08 1.3 KXO-97/V97	

Oscillators – VCXO/ TCXO/ VCTCXO/ PECL/ LVDS

 1.6 1.2 0.6 KXO-88	 2.0 1.6 0.7 KXO-81	 2.5 2.0 0.7 KXO-86	 3.2 2.5 0.9 KXO-84/KXO-V64 KXO-70
 5.0 3.2 1.5 KXO-83/ KXO-68 KXO-V62/ -V66/ KXO-72	 7.0 5.0 1.7 KXO-75/ KXO-67 KXO-V65/ -V63	 7.0 5.0 2.0 KXO-82	

Resonators

 3.2 1.3 1.0 KX-ZTT CE	 2.4 1.9 1.5 KX-ZTT CW	 3.1 3.7 1.0 KX-ZTT CW	 4.5 2.0 1.2 KX-ZTT CR
 4.7 4.1 1.6 KX-ZTT CS	 6.0 3.0 1.8 KX-ZTT CP		

Weitere Bauteile und Spezifikationen auf Anfrage erhältlich.
Other components and specifications available on request.
D'autres composants et les spécifications sont disponibles sur demande.

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