

FREQUENCY CONTROL PRODUCTS



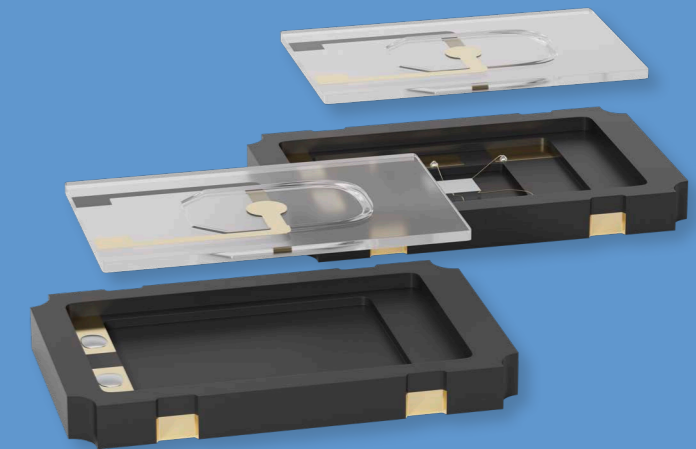
- › Quarz Crystals
- › Crystal Oscillators
- › MEMS Oscillators
- › TCXOs
- › OCXOs



TECHNICAL SUPPORT FROM YOUR LOCAL JAUCH TEAM

- › Consultation
- › Design-In Support
- › Support for application problems
- › Oscillator circuit validation

Talk to us about the optimal clock solution as early as the design phase starts. We will help you through the project-specific preselection of suitable components and calculations for special applications.



Your local sales and technical teams will support you in finding the right frequency control product for you. We will offer support from the beginning, allowing you to minimize your development time and cut unnecessary costs.

WORLDWIDE UNIQUE SERVICE FOR YOUR DEVELOPER

- › Creation of custom specifications for your project
- › Increased operational reliability in series production
- › Cost-optimized component selection and specification for the entire project life
- › Detailed advice and supervision by specialists
- › Validation of your circuit using special testing equipment
- › Samples for pilot productions or prototypes

QUARTZ CRYSTALS – SMD



QUARTZ CRYSTAL • SMD • CERAMIC/METAL PACKAGE

	TYPE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	JXS10	24.0~80.0	-40 °C ~ +85 °C	±10 ppm	±10 ppm	1.2 x 1.0 x 0.3
	JXS11	24.0~80.0	-40 °C ~ +125 °C	±10 ppm	±10 ppm	1.6 x 1.2 x 0.4
	JXS21	16.0~80.0	-40 °C ~ +125 °C	±10 ppm	±10 ppm	2.0 x 1.6 x 0.5
	JXS22	16.0~66.0	-40 °C ~ +125 °C	±10 ppm	±10 ppm	2.5 x 2.0 x 0.55
	JXS32	8.0~54.0 54.0 ~ 125.0 (3rd OT) on request	-40 °C ~ +125 °C	±10 ppm	±10 ppm	3.2 x 2.5 x 0.7
	JXS53	8.0~125.0	-40 °C ~ +125 °C	±10 ppm	±10 ppm	5.0 x 3.2 x 0.8
	JXS75	6.0~54.0	-40 °C ~ +125 °C	±10 ppm	±20 ppm	7.0 x 5.0 x 1.3

QUARTZ CRYSTAL FOR WIRELESS • SMD • METAL PACKAGE

	TYPE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	JXS21-WA	16.0~52.0	-40 °C ~ +105 °C	±10 ppm	±10 ppm	2.0 x 1.6 x 0.5
	JXS22-WA	16.0~52.0	-40 °C ~ +105 °C	±10 ppm	±10 ppm	2.5 x 2.0 x 0.55
	JXS32-WA	13.56~52.0	-40 °C ~ +105 °C	±10 ppm	±10 ppm	3.2 x 2.5 x 0.7

QUARTZ CRYSTAL • SMD • METAL PACKAGE / MOLDED BASE

	TYPE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	SMU2	4.0~33.0	-40 °C ~ +125 °C	±20 ppm	±20 ppm	11.5 x 4.8 x 3.0
	SMU4	3.2768~40.0	-40 °C ~ +105 °C	±20 ppm	±20 ppm	11.5 x 4.8 x 4.0
	SMU5	3.2768~40.0	-40 °C ~ +125 °C	±20 ppm	±20 ppm	13.1 x 5.0 x 5.0

* Please note: best frequency stability is not always available in max. temperature range.
Full data can be found online. All specifications are subject to change without notice.

QUARTZ CRYSTALS – PIN TYPE AND SMD



QUARTZ CRYSTAL • PIN TYPE • METAL PACKAGE

	TYPE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	SS2	4.0~33.0	-40 °C ~ +125 °C	±20 ppm	±20 ppm	11.3 x 4.7 x 2.5
	SS4	3.2768~40.0	-40 °C ~ +105 °C	±20 ppm	±20 ppm	11.3 x 4.7 x 2.5
	HC49/U	1.843~250.0	-40 °C ~ +125 °C	±3 ppm	±3 ppm	10.8 x 4.5 x 13.0
	HC49/U-SMC	1.843~250.0	-40 °C ~ +125 °C	±3 ppm	±3 ppm	17.5 x 10.8 x 5.3
	MQ1	4.0~250.0	-40 °C ~ +125 °C	±5 ppm	±3 ppm	7.9 x 3.3 x 8.0
	MQ1-SMC	4.0~250.0	-40 °C ~ +125 °C	±5 ppm	±3 ppm	11.7 x 7.8 x 3.4
	MQ5	10.0~250.0	-40 °C ~ +125 °C	±5 ppm	±3 ppm	7.7 x 3.1 x 5.8
	MQ5-SMC	10.0~250.0	-40 °C ~ +125 °C	±5 ppm	±3 ppm	9.7 x 7.7 x 3.4

TUNING FORK CRYSTAL • SMD

	TYPE	FREQUENCY RANGE in kHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	JTX110	32.7680 kHz	-40 °C ~ +85 °C	±20 ppm	-80 ppm	1.6 x 1.0 x 0.5
	JTX210	32.7680 kHz	-40 °C ~ +125 °C	±20 ppm	-80 ppm	2.0 x 1.2 x 0.6
	JTX310	32.7680 kHz	-40 °C ~ +125 °C	±10 ppm	-80 ppm	3.2 x 1.5 x 0.9
	JTX410	32.7680 kHz	-40 °C ~ +85 °C	±10 ppm	-80 ppm	4.1 x 1.5 x 0.9
	SMQ32SL	32.7680 kHz	-40 °C ~ +85 °C	±10 ppm	-80 ppm	8.0 x 3.8 x 2.4
	SMQ32SN	32.7680 kHz	-40 °C ~ +85 °C	±20 ppm	-80 ppm	7.0 x 1.5 x 1.3
	SM26F	32.7680 kHz	-40 °C ~ +85 °C	±20 ppm	-80 ppm	6.0 x 2.0 x 2.0

TUNING FORK CRYSTAL • PIN TYPE

	TYPE	FREQUENCY RANGE in kHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	MMTF32	32.7680 kHz	-40 °C ~ +85 °C	±10 ppm	-80 ppm	6.0 x 2.0 x 2.0

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QUARTZ CRYSTALS QUALIFIED TO AEC-Q200



QUARTZ CRYSTALS FOR AUTOMOTIVE APPLICATIONS

	TYPE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	JXS11P4	24.0 ~ 60.0	-40 °C ~ +125 °C	±10 ppm	±15 ppm	1.6 x 1.2 x 0.4
	JXS21P4	16.0 ~ 60.0	-40 °C ~ +125 °C	±10 ppm	±15 ppm	2.0 x 1.6 x 0.55
	JXS22P4	12.0 ~ 54.0	-40 °C ~ +125 °C	±10 ppm	±15 ppm	2.5 x 2.0 x 0.6
	JXS32P4	8.0 ~ 54.0	-40 °C ~ +125 °C	±10 ppm	±15 ppm	3.2 x 2.5 x 0.7
	SMU2	4.0 ~ 33.0	-40 °C ~ +125 °C	±20 ppm	±30 ppm	11.5 x 4.8 x 3.0
	SMU3	3.276 ~ 60.0	-40 °C ~ +125 °C	±20 ppm	±20 ppm	11.5 x 4.8 x 4.0
	JTX310	32.7680 kHz	-40 °C ~ +125 °C	±10 ppm	-80 ppm	3.2 x 1.5 x 0.9
	JTX210	32.7680 kHz	-40 °C ~ +125 °C	±20 ppm	-80 ppm	2.0 x 1.2 x 0.6

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QUARTZ CRYSTAL OSCILLATORS SMD



JO11 - OSCILLATOR - HCMOS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JO11 (1.8 V ~ 3.3 V)	variable supply voltage	5.0 ~ 60.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	1.6 x 1.2 x 0.7

JO21 - OSCILLATOR - HCMOS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JO21 (1.8 V ~ 3.3 V)	variable supply voltage	1.0 ~ 50.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.0 x 1.6 x 0.8
	JO21 (3.3 V)	Stop Function	0.5 ~ 80.0	-40 °C ~ +125 °C	±25 ppm	12 pF HCMOS	2.0 x 1.6 x 0.8
	JO21 (2.5 V)	Stop Function	0.5 ~ 80.0	-40 °C ~ +125 °C	±25 ppm	12 pF HCMOS	2.0 x 1.6 x 0.8
	JO21 (1.8 V)	Stop Function	0.5 ~ 80.0	-40 °C ~ +125 °C	±25 ppm	12 pF HCMOS	2.0 x 1.6 x 0.8

JO22 - OSCILLATOR - HCMOS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JO22 (1.8 V ~ 3.3 V)	variable supply voltage	1.0 ~ 50.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.5 x 2.0 x 0.9
	JO22 (3.3 V)	Stop Function	0.5 ~ 133.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.5 x 2.0 x 0.9
	JO22 (3.0 V)	Stop Function	0.5 ~ 133.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.5 x 2.0 x 0.9
	JO22 (2.5 V)	Stop Function	0.5 ~ 133.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.5 x 2.0 x 0.9
	JO22 (1.8 V)	Stop Function	0.5 ~ 133.0	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.5 x 2.0 x 0.9
	JO22H (1.8 V / 2.5 V / 3.3 V)	High Stability Type	13.0 ~ 54.0	-40 °C ~ +85 °C	±10 ppm	15 pF HCMOS	2.5 x 2.0 x 0.9

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CUSTOMIZED QUARTZ CRYSTALS

- › Extremely tight frequency stabilities
- › Lowest ESR values
- › Special pulling sensitivities

CUSTOMIZED QUARTZ CRYSTALS

	TYPE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY TOLERANCE*	FREQUENCY STABILITY*	L x W x H in mm
	HC49/U	1.8432 ~ 40.0 (fund. AT) 20.0 ~ 105.0 (3rd OT)	-40 °C ~ +125 °C	±3 ppm	±3 ppm	10.8 x 4.5 x 13.0
	HC49/U SMC	50.0 ~ 175.0 (5th OT) 70.0 ~ 250.0 (7th OT)	-40 °C ~ +125 °C	±3 ppm	±3 ppm	17.5 x 10.8 x 5.3
	MQ1	4.0 ~ 40.0 (fund. AT) 20.0 ~ 105.0 (3rd OT)	-40 °C ~ +125 °C	±5 ppm	±3 ppm	7.9 x 3.3 x 8.0
	MQ1-SMC	50.0 ~ 175.0 (5th OT) 70.0 ~ 250.0 (7th OT)	-40 °C ~ +125 °C	±5 ppm	±3 ppm	11.7 x 7.8 x 3.4
	MQ5	10.0 ~ 40.0 (fund. AT) 30.0 ~ 105.0 (3rd OT)	-40 °C ~ +125 °C	±5 ppm	±3 ppm	7.7 x 3.1 x 5.8
	MQ5-SMC	50.0 ~ 175.0 (5th OT) 70.0 ~ 250.0 (7th OT)	-40 °C ~ +125 °C	±5 ppm	±3 ppm	9.7 x 7.7 x 3.4

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QUARTZ CRYSTAL OSCILLATORS SMD



J032 - OSCILLATOR - HCMOS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	J032 (1.8 V ~ 3.3 V)	variable supply voltage	1.0 ~ 50.0	-40 °C ~ +125 °C	±25 ppm	15 pF / 30 pF HCMOS	3.2 x 2.5 x 1.1
	J032 (3.3 V)	Stop Function	0.75 ~ 170.0	-40 °C ~ +125 °C	±25 ppm	15 pF / 30 pF HCMOS	3.2 x 2.5 x 1.1
	J032 (3.0 V)	Stop Function	0.75 ~ 170.0	-40 °C ~ +125 °C	±25 ppm	15 pF / 30 pF HCMOS	3.2 x 2.5 x 1.1
	J032 (2.8 V)	Stop Function	0.75 ~ 170.0	-40 °C ~ +125 °C	±25 ppm	15 pF / 30 pF HCMOS	3.2 x 2.5 x 1.1
	J032 (2.5 V)	Stop Function	0.75 ~ 170.0	-40 °C ~ +125 °C	±25 ppm	15 pF / 30 pF HCMOS	3.2 x 2.5 x 1.1
	J032 (1.8 V)	Stop Function	0.75 ~ 135.0	-40 °C ~ +125 °C	±25 ppm	15 pF / 30 pF HCMOS	3.2 x 2.5 x 1.1
	J033H (1.8 V / 2.5 V / 3.3 V)	High Stability Type	10.0 ~ 54.0	-40 °C ~ +85 °C	±10 ppm	15 pF HCMOS	3.2 x 2.5 x 1.0

J053 - OSCILLATOR - HCMOS - SMD

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	J053 (3.3 V)	Stop Function	0.5 ~ 160.0	-40 °C ~ +125 °C	±20 ppm	15 pF / 30 pF HCMOS	5.0 x 3.2 x 1.4
	J053 (2.5 V)	Stop Function	0.5 ~ 160.0	-40 °C ~ +125 °C	±20 ppm	15 pF / 30 pF HCMOS	5.0 x 3.2 x 1.4
	J053 (1.8 V)	Stop Function	0.5 ~ 160.0	-40 °C ~ +125 °C	±20 ppm	15 pF / 30 pF HCMOS	5.0 x 3.2 x 1.4

J075 - OSCILLATOR - HCMOS - SMD

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	J075 (3.3 V)	Stop Function	1.0 ~ 170.0	-40 °C ~ +125 °C	±20 ppm	15 pF / 30 pF HCMOS	7.0 x 5.0 x 1.8
	J075 (2.5 V)	Stop Function	0.5 ~ 160.0	-40 °C ~ +125 °C	±20 ppm	15 pF / 30 pF HCMOS	7.0 x 5.0 x 1.8
	J075 (1.8 V)	Stop Function	0.5 ~ 160.0	-40 °C ~ +125 °C	±20 ppm	15 pF / 30 pF HCMOS	7.0 x 5.0 x 1.8

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QUARTZ CRYSTAL OSCILLATORS SMD



JV32 - OSCILLATOR - HCMOS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JV32 (3.3 V)	VCXO	1.25 ~ 55.0	-40 °C ~ +85 °C	±25 ppm	15 pF HCMOS	3.2 x 2.5 x 1.0
	JV54 (3.3 V)	VCXO	1.0 ~ 125.0	-40 °C ~ +85 °C	±25 ppm	15 pF HCMOS	5.0 x 3.2 x 1.2
	JV75 (3.3 V)	VCXO	1.0 ~ 125.0	-40 °C ~ +85 °C	±25 ppm	15 pF HCMOS	7.0 x 5.0 x 1.9

TUNING FORK OSCILLATOR - 32.768 kHz - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in kHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JR032	uses tuning Fork Crystal	32.768 kHz	-40 °C ~ +105 °C	±25 ppm	15 pF HCMOS	3.2 x 2.5 x 1.0
	J032 32.768 kHz	uses tuning Fork Crystal	32.768 kHz	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	3.2 x 2.5 x 1.0
	J022 32.768 kHz	uses tuning Fork Crystal	32.768 kHz	-40 °C ~ +125 °C	±25 ppm	15 pF HCMOS	2.5 x 2.0 x 0.8

(VOLTAGE CONTROLLED) TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS

(VC)TCXO - CLIPPED SINE - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JT11S(V)	VCTCXO or TCXO	13.0 ~ 52.0	-40 °C ~ +85 °C	±0.5 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	1.6 x 1.2 x 0.55
	JT21S(V)	VCTCXO or TCXO	13.0 ~ 52.0	-40 °C ~ +85 °C	±0.5 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	2.0 x 1.6 x 0.8
	JT21G	TCXO for GPS	26.0 ~ 38.40	-40 °C ~ +85 °C	±0.5 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	2.0 x 1.6 x 0.7
	JT21ET(E)	TCXO and Standby Function	12.0 ~ 52.0	-40 °C ~ +105 °C	±2.0 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	2.0 x 1.6 x 0.8
	JT21LE 1.2 ~ 1.8 V	Low Voltage TCXO	13.0 ~ 52.0	-40 °C ~ +85 °C	±0.5 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	2.0 x 1.6 x 0.8
	JT22S(V)	VCTCXO or TCXO	10.0 ~ 52.0	-40 °C ~ +85 °C	±1 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	2.5 x 2.0 x 0.95
	JT33(V)	VCTCXO or TCXO	10.0 ~ 52.0	-40 °C ~ +85 °C	±1 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	3.2 x 2.5 x 1.0
	JT53L(V)	VCTCXO or TCXO	10.0 ~ 52.0	-40 °C ~ +85 °C	±1 ppm	10 KΩ // 10 pF > 0.8 Vpp (clipped sine)	5.0 x 3.2 x 1.05

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(VOLTAGE CONTROLLED) TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS



TCXO - HCMOS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JT21CT	TCXO	13.0 ~ 52.0	-40 °C ~ +105 °C	±2.0 ppm	15 pF HCMOS	2.0 x 1.6 x 0.7
	JT22CT	TCXO	13.0 ~ 52.0	-40 °C ~ +105 °C	±2.0 ppm	15 pF HCMOS	2.5 x 2.0 x 0.8
	JT32CT	TCXO	10.0 ~ 52.0	-40 °C ~ +105 °C	±2.0 ppm	15 pF HCMOS	3.2 x 2.5 x 1.0

(VC)TCXO PRECISION - HCMOS - SMD

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JTP53HC(V)	TCXO Precision	9.6 ~ 50.0	-40 °C ~ +105 °C	±0.05 ppm	15 pF HCMOS	5.0 x 3.2 x 1.7
	JTS53HC(V)	Stratum 3 compliant (VC)TCXO	9.6 ~ 50.0	-40 °C ~ +105 °C	±0.05 ppm	15 pF HCMOS	5.0 x 3.2 x 1.7
	JTP75HC(V)	TCXO Precision	9.6 ~ 50.0	-40 °C ~ +105 °C	±0.05 ppm	15 pF HCMOS	7.0 x 5.0 x 2.2
	JTS75HC(V)	Stratum 3 compliant (VC)TCXO	9.6 ~ 50.0	-40 °C ~ +105 °C	±0.05 ppm	15 pF HCMOS	7.0 x 5.0 x 2.2

(VC)TCXO PRECISION - CLIPPED SINE - SMD

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JTP32CS(V)	TCXO Precision	9.6 ~ 50.0	-40 °C ~ +85 °C	±0.28 ppm	10 KΩ // 10 pF > 0.6 Vpp (clipped sine)	3.2 x 2.5 x 0.9
	JTS32CS(V)	Stratum 3 compliant (VC)TCXO	9.6 ~ 50.0	-40 °C ~ +85 °C	±0.28 ppm	10 KΩ // 10 pF > 0.6 Vpp (clipped sine)	3.2 x 2.5 x 0.9

OCXO - OSCILLATOR - SINE OR HCMOS

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JOX254	VCOXO or OCXO	10.0 ~ 100.0	-40 °C ~ +85 °C	±0.5 ppb ~ ±50 ppb	Sine or HCMOS	25.4 x 25.4 x 13

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XO HCSSL - LVDS - PECL



OSCILLATOR PECL - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JOE75 MESA	PECL XO	170.0 ~ 320.0	-40 °C ~ +85 °C	±25 ppm	50 Ω at VDC ~ 2.0 V	7.0 x 5.0 x 1.4
	JOE75 30T	PECL XO	65.0 ~ 200.0	-40 °C ~ +85 °C	±25 ppm	50 Ω at VDC ~ 2.0 V	7.0 x 5.0 x 1.5
	JOE32	PECL XO	13.5 ~ 200.0	-40 °C ~ +125 °C	±25 ppm	50 Ω at ~ 1.3 V	3.2 x 2.5 x 0.95

OSCILLATOR LVDS - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JOD75 MESA	LVDS XO	170.0 ~ 320.0	-40 °C ~ +85 °C	±25 ppm	100 Ω differential > 0.33 Vp-p typ. / 0.25 Vp-p min.	7.0 x 5.0 x 1.4
	JOD75 30T	LVDS XO	65.0 ~ 200.0	-40 °C ~ +85 °C	±25 ppm	100 Ω differential > 0.33 Vp-p typ. / 0.25 Vp-p min.	7.0 x 5.0 x 1.5
	JOD32	LVDS XO	13.5 ~ 200.0	-40 °C ~ +125 °C	±25 ppm	100 Ω differential > 0.33 Vp-p typ. / 0.25 Vp-p min.	3.2 x 2.5 x 0.95

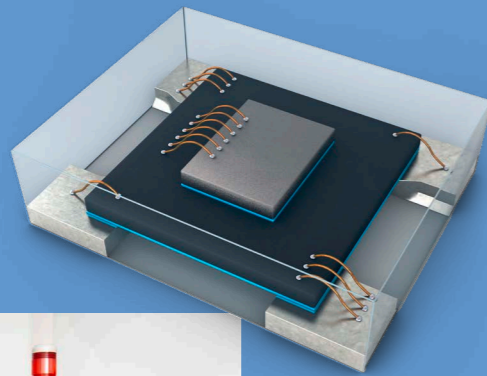
OSCILLATOR HCSSL - SMD - CERAMIC / METAL PACKAGE

	TYPE	FEATURE	FREQUENCY RANGE in MHz	TEMPERATURE RANGE (max.)*	FREQUENCY STABILITY*	OUTPUT AND LOAD	L x W x H in mm
	JOH32	HCSSL XO	13.5 ~ 200.0	-40 °C ~ +125 °C	±25 ppm	50 Ω to GND at each output > 0.65 Vp-p (3.3 V) / 0.6 Vp-p (2.5 V)	3.2 x 2.5 x 0.95

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MEMS OSCILLATORS

MEMS-BASED SOLUTIONS FROM
SiTime PRESENTED BY JAUCH QUARTZ



FACTS ABOUT MEMS TECHNOLOGY:

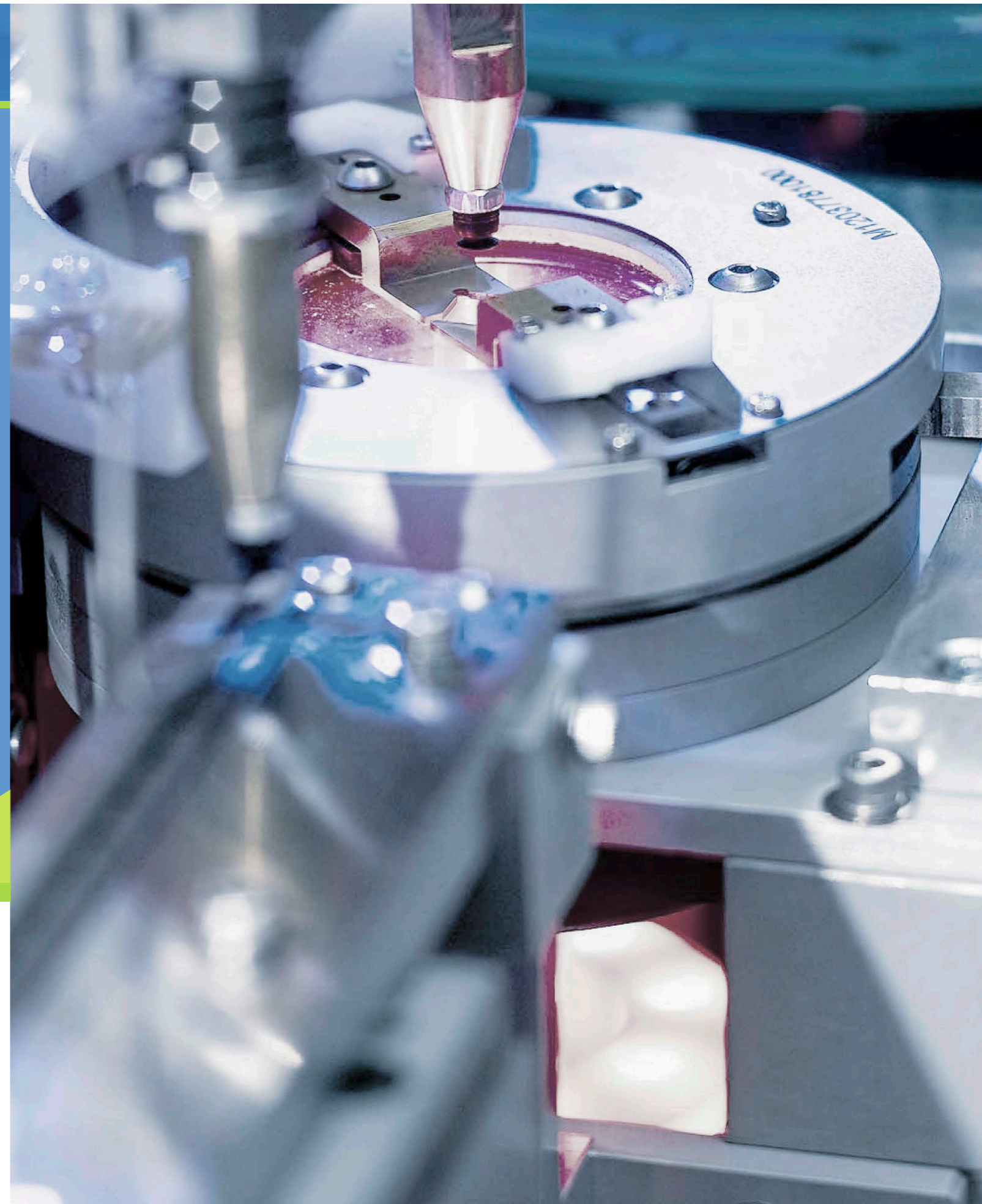
- › Customized and configurable
- › Fast delivery service for small quantities
- › Extremely high shock and vibration immunity: 50,000 G shock and 70 G vibration
- › Wide operating temperature range: -55 °C ~ +125 °C
- › High frequency stability over the entire operating temperature range: ±20 ppm
- › 100% drop-in replacement for standard QFN packages 2016, 2520, 3225, 5032 and 7050 (QFN = Quad Flatpack No-Lead)
- › MEMS oscillators are produced in semiconductor factories. This ensures the uniformity of the components.
- › Extremely reliable due to the semiconductor production process.
- › A silicon resonator is used inside MEMS oscillators instead of a silicon dioxide resonator which is used inside crystal oscillators.



MEMS OSCILLATORS ORDER

“At Jauch, you can conveniently order MEMS oscillator samples. We specialize in configuring MEMS oscillators to meet your specific requirements and ensure swift delivery. Whether you need small batches or medium quantities, customization is our forte.

Our advantage lies in Jauch’s proprietary MEMS programming machine, which allows us to program and dispatch components with speed and flexibility. For personalized guidance, our dedicated sales department is ready to assist you.”

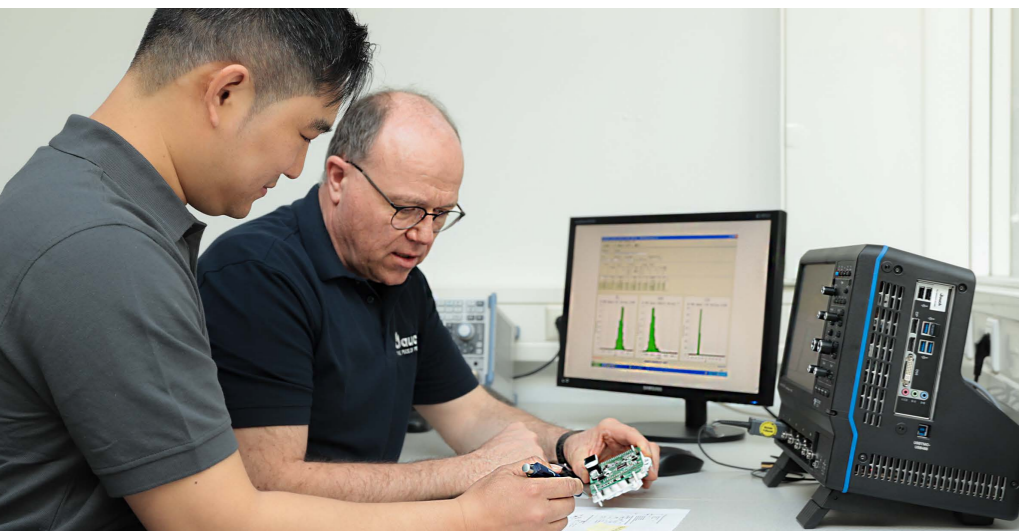
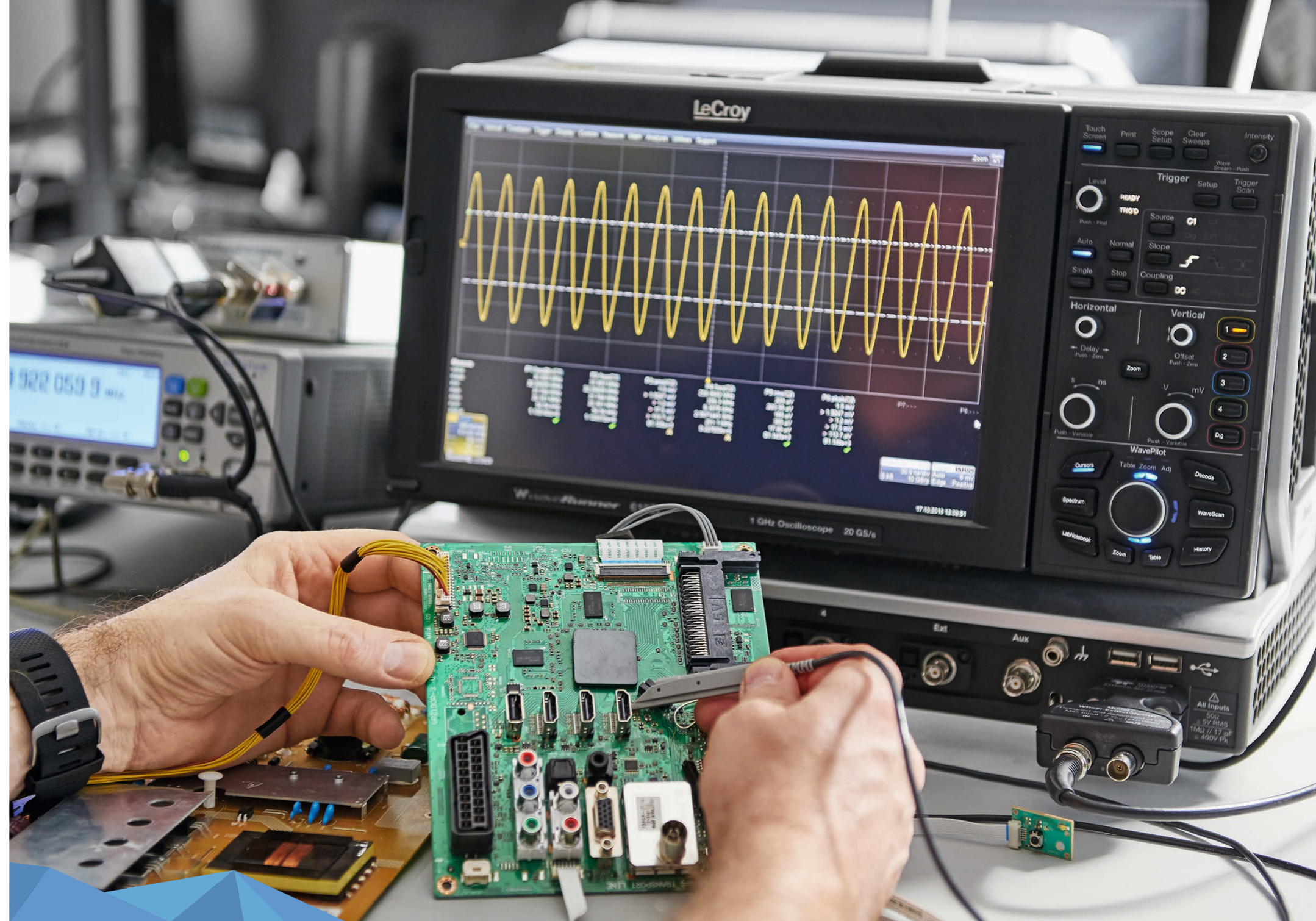


From frequency control products for standard applications to highly stable, shock-resistant components – Jauch products operate reliably in your applications. We ensure this with our quality assurance, which starts even before production does.

JAUCH QUALITY MANAGEMENT

To maintain the consistently high quality of our products and services, we continuously implement measures to safeguard and improve our effectiveness and efficiency. These include internal audits of system, process and procedure workflows as well as audits of our production partners and suppliers.

In addition, important key figures are regularly determined in order to keep a constant eye on quality and make targeted decisions.

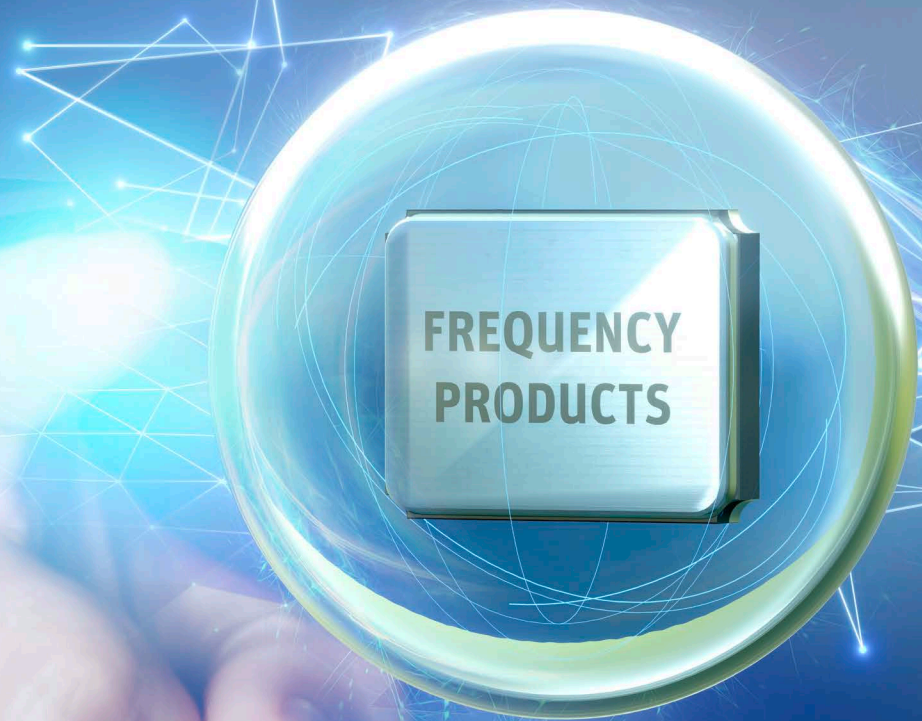


JAUCH QUALITY ASSURANCE

- › ISO 9001:2015, ISO 14001 certification and IATF 16949 for automotive applications
- › Internal & external audit procedure
- › Key figure determination
- › Components qualification
- › Determining the reliability figures of specific components
- › Product verification according to RoHS and REACH
- › Components inspection
- › Incoming and outgoing goods inspection
- › Calibration

RELIABLE AND SAFE:

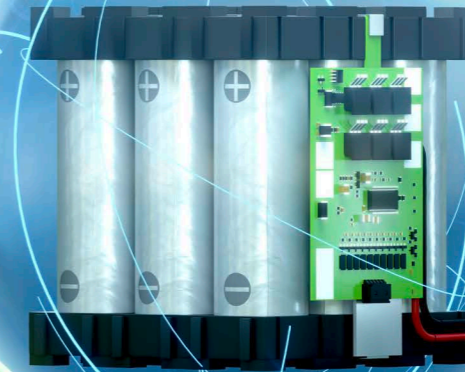
FREQUENCY PRODUCTS AND BATTERY SOLUTIONS



FREQUENCY
PRODUCTS

ABOUT JAUCH

The Jauch Group is one of the leading specialists for quartz crystals, crystal oscillators, (VC)TCXOs, VCXOs and battery technology. Established in 1954, we are a leading company in the frequency control products industry.



We are also a recognized expert for lithium ion and lithium polymer battery solutions. Along with our subsidiaries in France, Great Britain and the USA, we are able to develop and provide pioneering technology solutions.



Frequency Control and Battery Technology



Find technical knowledge and interesting content in the form of e-books, whitepapers and documents relating to frequency control products and battery technology.

https://www.jauch.com/en-INT/know_how



Learn more about our frequency products and services.

https://www.jauch.com/en-INT/consulting/frequency_technical_services

#WeAreJauch





B.C.E. s.r.l.
Via Regina Pacis, 54/c - 41049 SASSUOLO (MO) Italy
Tel. +39 0536 811.616 r.a. - Fax +39 0536 811.500
www.bce.it - E-mail: bce@bce.it

