

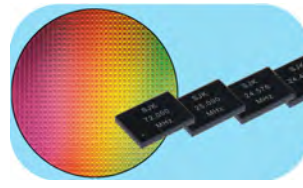
Special Introduced product - MEMS Oscillator



MEMS Oscillator can be Pin-to-Pin quartz Oscillator



Programmable, Samples -48hrs fast delivery


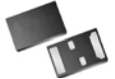


High performance, Low power More reliable, Lower cost




Ultra-smaller, Up to 80% space reduction


32.768 kHz MEMS Oscillators

Type	Package	Freq.range	Output	Feature
	1.5×0.8×0.60mm MEMS Oscillator	32.768kHz	CMOS	<ul style="list-style-type: none"> Ultra-size:1.5×0.8mm. Ultra-low power:<1.0μA
	2.0×1.2×0.6mm MEMS Oscillator	32.768kHz	CMOS	<ul style="list-style-type: none"> Ultra-size:2.0×1.2mm. Ultra-low power:<1.0μA


Low Power MEMS Oscillator

Type	Package	Freq.range	Output	Feature
	2.0×1.6 / 2.5×2.0 / 3.2×2.5 / 5.0×3.2 / 7.0×5.0 mm	1~137MHz	LVC MOS /HCMOS	<ul style="list-style-type: none"> Low power of 3.5mA at 1.8V. Faster delivery.


Differential MEMS Oscillator

Type	Package	Freq.range	Output	Feature
	3.2×2.5 / 5.0×3.2 / 7.0×5.0 mm	1~725MHz	LVPECL /LVDS/HCSL	<ul style="list-style-type: none"> LVPECL/LVDS/HCSL output Low phase jitter


High Temperature MEMS

Type	Package	Freq.range	Output	Feature
	2.0×1.6 / 2.5×2.0 / 3.2×2.5 / 5.0×3.2 / 7.0×5.0 mm	1~137MHz	LVC MOS /LV TTL	<ul style="list-style-type: none"> Supply voltage:1.8,2.5,3.3V. Faster delivery. OTR:-40°C ~+125°C










Spread Spectrum MEMS

Type	Package	Freq.range	Output	Feature
	2.0×1.6 / 2.5×2.0 / 3.2×2.5 mm	1~141MHz	LVC MOS /LV TTL	<ul style="list-style-type: none"> Up to 30 dB reduction EMI reduction, Field Programmable







Ultra-performance MEMS

Type	Package	Freq.range	Output	Feature
	2.5×2.0 / 3.2×2.5 / 5.0×3.2 / 7.0×5.0mm	1~220MHz	LVC MOS /LV TTL	<ul style="list-style-type: none"> Frequency stability:±10ppm Phase jitter:0.5ps











Voltage Controlled Crystal Oscillator/VCXO

Type	Package	Freq.range	Output	Feature
3S 	3.2×2.5×0.9mm Seam sealed SMD	10~250MHz	CMOS	<ul style="list-style-type: none"> • Smaller size • Low jitter
3P/3V 	3.2×2.5×0.9mm Seam sealed SMD	10~1500MHz	LVPECL/LVDS	<ul style="list-style-type: none"> • Smaller size • Differential logic
5S 	5.0×3.2×1.2mm Seam sealed SMD	10~250MHz	CMOS	<ul style="list-style-type: none"> • Smaller size • Low jitter
5V/5P/5VH 	5.0×3.2×1.2mm Seam sealed SMD	10~1500MHz	LVPECL/LVDS/ HCSL	<ul style="list-style-type: none"> • Smaller size • Differential logic
6S 	7.0×5.0×1.4mm Seam sealed SMD	10~250MHz	CMOS	<ul style="list-style-type: none"> • Tight symmetry • Low phase noise
7P/6V/7VH 	7.0×5.0×1.4mm Seam sealed SMD	10~1500MHz	LVPECL/LVDS/ HCSL	<ul style="list-style-type: none"> • Wide pulling range • Differential logic
9N/9P 	14.0×9.1×3.6mm FR-4 PCB SMD Package	50~125MHz	CMOS/Sine wave	<ul style="list-style-type: none"> • FR-4 PCB based • 3-state available
6RH 	12.9×12.9×5.5mm Through hole Package	1~200MHz	CMOS	<ul style="list-style-type: none"> • Standard DIP 8 Pin • Low phase noise
6RF 	20.4×13.1×6.0mm Through hole Package	1~220MHz	CMOS	<ul style="list-style-type: none"> • Standard DIP 14 Pin • Low phase noise





Tuning Fork Crystal Units

Type	Package	Freq.range	Feature
7K 	1.6×1.0×0.5mm Seam sealed SMD Package	32.768kHz	<ul style="list-style-type: none"> • Ultra smaller size • SMD Watch Crystal
7R 	2.0×1.2×0.6mm Seam sealed SMD Package	32.768kHz	<ul style="list-style-type: none"> • Ultra smaller size • SMD Watch Crystal
7L 	3.2×1.5×0.75mm Seam sealed SMD Package	32.768kHz	<ul style="list-style-type: none"> • Ultra smaller size • SMD Watch Crystal
7M 	7.0×1.5×1.4mm Plastic SMD Package	32.768kHz	<ul style="list-style-type: none"> • Small size • SMD Watch Crystal
6LC 	8.0×3.8×2.5mm Plastic SMD Package	32.768kHz (30~350kHz)	<ul style="list-style-type: none"> • SMD Watch Crystal
6K 	2.0×6.0/3.0×8.0mm Through hole Package	32.768kHz (30~350kHz)	<ul style="list-style-type: none"> • Watch Crystal








SAW Resonator/Filter

Type	Package	Freq.range	Feature
6AW 	3.2×2.5×0.7mm Seam Sealed SMD Package	315/433.92MHz	<ul style="list-style-type: none"> • Ultra small size • Low insert loss
QCC8D 	3.0×3.0×1.4mm Seam sealed SMD Package	249.5~3700MHz	<ul style="list-style-type: none"> • Ultra small size • Low insert loss
DCC6C 	3.0×3.0×1.5mm Seam sealed SMD Package	120~2675MHz	<ul style="list-style-type: none"> • Ultra small size • Low insert loss
QCC8B 	3.8×3.8×1.3mm Seam sealed SMD Package	177~1990MHz	<ul style="list-style-type: none"> • Small size • Low insert loss
DCC6 	3.8×3.8×1.5mm Seam sealed SMD Package	315~868MHz	<ul style="list-style-type: none"> • Ultra small size • Low insert loss
QCC4A 	5.0×3.5×1.5mm Seam sealed SMD Package	315~868MHz	<ul style="list-style-type: none"> • Small size • Low insert loss
QCC8C 	5.0×5.0×1.5mm Seam sealed SMD Package	299~868MHz	<ul style="list-style-type: none"> • Small size • Low insert loss
QCC12 	13.3×6.5×1.6mm Seam sealed SMD Package	70~899MHz	<ul style="list-style-type: none"> • Small size • Low insert loss
TO-39 	9.15×9.15×3.3mm TO-39 Package	303~868MHz	<ul style="list-style-type: none"> • Small size • Low insert loss
F-11 	10.9×4.45×4.0mm F-11 Package	303~868MHz	<ul style="list-style-type: none"> • Small size • Low insert loss









Monolithic Crystal Filters/MCF

Type	Package	Freq.range	Feature
7DUT 	11.5×4.5×11.2mm HC-49T Package	10.7~45MHz	<ul style="list-style-type: none"> • Low insertion loss • High selectivity
7DU1 	7.8×3.1×8.0mm UM-1 Package	10.7~45MHz	<ul style="list-style-type: none"> • Low insertion loss • High selectivity
7DU5 	7×3.1×6.0mm UM-5 Package	10.7~45MHz	<ul style="list-style-type: none"> • Low insertion loss • High selectivity
CF 	7.0×5.0×1.3mm Seam sealed SMD Package	21.4~73.35MHz	<ul style="list-style-type: none"> • Excellent shock and vibration resistance • SMD package for automatic pick














Crystal Oscillators(CMOS Output)

Type	Package	Freq.range	Output	Feature
8N	 1.6×1.2×0.5mm Seam sealed SMD	1~80MHz	CMOS	<ul style="list-style-type: none"> • Ultra smaller size • Low jitter
1N	 2.0×1.6×0.75mm Seam sealed SMD	4~54MHz	CMOS	<ul style="list-style-type: none"> • Ultra smaller size • Low jitter
2N	 2.5×2.0×0.8mm Seam sealed SMD	32.768kHz~75MHz	CMOS	<ul style="list-style-type: none"> • Smaller size • Low jitter
3N	 3.2×2.5×1.0mm Seam sealed SMD	32.768kHz~125MHz	CMOS	<ul style="list-style-type: none"> • Smaller size • Low phase noise
7N	 5.0×3.2×1.2mm Seam sealed SMD	32.768kHz~160MHz	CMOS	<ul style="list-style-type: none"> • Smaller size • Low current consumption
6N	 7.0×5.0×1.3mm Seam sealed SMD	32.768kHz~200MHz	CMOS	<ul style="list-style-type: none"> • Smaller size • Low jitter
6MF	 20.4×13.1×5.3mm Through hole Package	0.25~180MHz	CMOS	<ul style="list-style-type: none"> • All metal welded package • 14-Pin full-size
6MH	 12.9×12.9×5.3mm Through hole Package	0.25~180MHz	CMOS	<ul style="list-style-type: none"> • All metal welded package • 8-Pin full-size




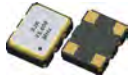




Oven Controlled Crystal Oscillator/OCXO

Type	Package	Freq.range	Output	Feature
1X	 9.7×7.5×4.1mm Seam sealed SMD	10~40MHz	Rectangular /Clipped	<ul style="list-style-type: none"> • Ultra smaller size • SC-cut crystal
9X	 14.5×9.6×6.5mm Seam sealed SMD	5~40MHz	HCMOS	<ul style="list-style-type: none"> • AT-cut crystal • Low power consumption
2X	 20.3×12.7×11.0mm DIP-14 Full-size	5~100MHz	HCMOS /Sinewave	<ul style="list-style-type: none"> • SC or AT-cut crystal • High stability
3X	 20.6×20.6×11.0mm Thru-hole DIP	5~40MHz	HCMOS	<ul style="list-style-type: none"> • Smaller size • SC-cut crystal
5X	 25.4×22.1×11.0mm Seam sealed SMD	5~40MHz	HCMOS	<ul style="list-style-type: none"> • SC or AT-cut crystal • High stability
5X2	 25.4×22.1×13.2mm Seam sealed SMD	10~100MHz	Sinewave	<ul style="list-style-type: none"> • SC-cut crystal • Fast warm-up
9M	 25.4×25.4×12.7mm Thru-hole DIP Package	5~100MHz	Rectangular/ Sinewave	<ul style="list-style-type: none"> • SC-cut crystal • Low phase noise
6X	 36.3×27.2×12.7mm Thru-hole DIP Package	5~100MHz	LVTTTL/HCMOS /SineWave	<ul style="list-style-type: none"> • SC-cut crystal • Stratum 3E compliant




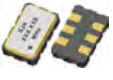



Quartz Crystal Unit

Type	Package	Freq.range	Feature
7S	 1.2×1.0×0.3mm Seam sealed SMD Package	24~54MHz	<ul style="list-style-type: none"> • Ultra smaller size • High stability
7Y	 1.6×1.2×0.35mm Seam sealed SMD Package	24~54MHz	<ul style="list-style-type: none"> • Ultra smaller size • High stability
7F	 2.0×1.6×0.5mm Seam sealed SMD Package	16~96MHz	<ul style="list-style-type: none"> • Ultra smaller size • High stability
7E	 2.5×2.0× 0.55mm Seam sealed SMD Package	12~54MHz	<ul style="list-style-type: none"> • Smaller size • High stability
7U	 3.2×2.5×0.7mm Seam sealed SMD Package	8~64MHz	<ul style="list-style-type: none"> • High precision • High stability
7I	 5.0×3.2×0.9mm Seam sealed SMD Package	8~125MHz	<ul style="list-style-type: none"> • High precision • High stability
6G	 6.0×3.5×1.0mm Seam sealed SMD Package	8~100MHz	<ul style="list-style-type: none"> • Tight tolerance
6F	 7.0×5.0×1.0mm Seam sealed SMD Package	6~160MHz	<ul style="list-style-type: none"> • Tight tolerance
6I	 5.0×3.2×0.9mm Glass sealed SMD Package	8~54MHz	<ul style="list-style-type: none"> • Smaller size • Glass seam package
6A	 11.05×4.65×13.46mm HC-49U Package	1.8432~150MHz	<ul style="list-style-type: none"> • High reliability • High stability
6B	 10.5×3.5×3.0mm HC-49S Package	3~100MHz	<ul style="list-style-type: none"> • Standard footprint • PCB stacking
6C	 13.0×4.8×4.0/3.0mm HC-49SMD Package	3~100MHz	<ul style="list-style-type: none"> • Metal can SMD package
6Z	 2.0×6.0/3.0×8.0mm Cylinder Through hole	3.579~50MHz	<ul style="list-style-type: none"> • Small size • High shock tolerance
6D	 7.8×3.2×7.8mm UM-1 Package	4~200MHz	<ul style="list-style-type: none"> • High frequency range
6E	 7.8×3.2×6.0mm UM-5 Package	4~200MHz	<ul style="list-style-type: none"> • High frequency range

Temperature Compensated Crystal Oscillators/TCXO

Type	Package	Freq.range	Output	Feature
7X 	2.0×1.6×0.75mm Seam sealed SMD	10~60MHz	Clipped Sinewave	<ul style="list-style-type: none"> Ultra smaller size VCTCXO available
7Q 	2.5×2.0×0.7mm Seam sealed SMD	32.768kHz~60MHz	Clipped Sinewave	<ul style="list-style-type: none"> Ultra smaller size VCTCXO available
7W 	2.5×2.0×0.85mm Seam sealed SMD	10~60MHz	LVC MOS	<ul style="list-style-type: none"> Ultra smaller size 0.5ppm~2.0ppm
8W 	3.2×2.5×1.0mm Seam sealed SMD	32.768kHz~60MHz	Clipped Sinewave	<ul style="list-style-type: none"> Ultra smaller size VCTCXO available
7T 	3.2×2.5×1.0mm Seam sealed SMD	10~60MHz	LVC MOS	<ul style="list-style-type: none"> Ultra smaller size 0.5ppm~2.0ppm
5T 	5.0×3.2×1.5mm Seam sealed SMD	10~60MHz	Clipped Sinewave	<ul style="list-style-type: none"> Small size VCTCXO available
8T 	7.0×5.0×2.0mm Seam sealed SMD	32.768kHz~60MHz	Clipped Sinewave	<ul style="list-style-type: none"> Small size VCTCXO available
9T 	14.5×9.6×6.5mm FR-4 PCB SMD Package	40~125MHz	LVC MOS	<ul style="list-style-type: none"> Standard DIP 14Pin Low phase noise
6T 	20.4×12.8×7.8mm Through hole Package	1.25~52MHz	Clipped Sinewave	<ul style="list-style-type: none"> FR-4 PCB based VCTCXO available

Crystal Oscillators(Differential Output)

Type	Package	Freq.range	Output	Feature
3J/3D 	3.2×2.5×1.0mm Seam sealed SMD	10~250MHz	LVPECL /LVDS	<ul style="list-style-type: none"> Ultra smaller size Low jitter
3H 	3.2×2.5×1.0mm Seam sealed SMD	10~250MHz	HCSL	<ul style="list-style-type: none"> Ultra smaller size Low jitter
5J/5D 	5.0×3.2×1.2mm Seam sealed SMD	10MHz~1.5GHz	LVPECL /LVDS	<ul style="list-style-type: none"> Small size Low jitter
5H 	5.0×3.2×1.25mm Seam sealed SMD	10~220MHz	HCSL	<ul style="list-style-type: none"> Small size Low jitter
7J/7B 	7.0×5.0×1.4mm Seam sealed SMD	10MHz~1.5GHz	LVPECL /LVDS	<ul style="list-style-type: none"> Small size Low jitter
7H 	7.0×5.0×1.4mm Seam sealed SMD	10~220MHz	HCSL	<ul style="list-style-type: none"> Small size Low jitter
9J/9D 	14.0×9.0×5.4mm SMD Package	25~700MHz	LVPECL /LVDS	<ul style="list-style-type: none"> Low phase noise Low jitter