KDS DAISHINKU CORP.
01189 324600
sales@bt2000.co.uk

Broadband Technology 2000

2021–2022
SELECTION GUIDE

SELECTION GUIDE

- Arkh.3G series
- Crystal resonators
- Crystal oscillators
- Monolithic crystal filters
- Optical products
- MEMS oscillators

Global Quality
株式会社 大真空

Crystal Resonators

Scan the QR code to check the table of contents page of our web site "Crystal Resonators" (URL: https: //www.kds.info/class/1-l-qr/).

Icons CE Consumer Equipment IE Industrial Equipment TC Mobile Phone, Wireless Communication AE Automotive Electronics

SMD Crystal Resonators / MHz Band Crystal Resonators

Type	Actual Size	Size (mm) L	W	H (max.)	Frequency Range (MHz)	Frequency Tolerance (×10⁻⁶) @+25℃	Frequency Characteristics over Temperature (×10⁻⁶)	Operating Temperature Range (℃)	Load Capacitance (pF)	Drive Level (μw(max.))	Lid	Recommended Application	Catalog Page
DSX1008A		1.0	0.8	0.3	40 to 80	±10	±12	-30 to +85	8, 10 ,12	10 (100)	Metal	CE TC	17
DX1008JS		1.05	0.85	0.13	48 to 120	±20	±30	-30 to +85	8, 10 ,12	10 (100)	Crystal	CE TC	7
DSX1210A		1.2	1.0	0.3	32 to 96	±10	±12	-30 to +85	8, 10 ,12	10 (100)	Metal	CE TC	18
DSX1612S		1.6	1.2	0.4	24 to 54	±10	±15	-30 to +85	8, 10 ,12	10 (100)	Metal	CE TC	19
DSX211S		2.0	1.6	0.5	76.8, 80, 96	±20	±30	-30 to +85	8, 10 ,12	10 (400)	Metal	CE IE TC	20
DSX211SH		2.0	1.6	0.5	16 to 60	±20 ±30	±30 ±100	-30 to +85 -40 to +125	8, 10 ,12	10 (100) 10 (200)	Metal	CE IE TC AE	20 67
DSX221SH		2.5	2.0	0.5	12 to 54								
DSX321SH		3.2	2.5	0.75	12 to 50								
DSX210GE		2.2	1.6	1.0	16 to 64	±30	±100	-40 to +125	8, 10 ,12	10 (100)	Ceramic	AE	64
DSX211G		2.0	1.6	0.8	20 to 64	±20 ±30	±30 ±100	-30 to +85 -40 to +125	8, 10 ,12	10 (100)	Ceramic	CE IE TC AE	21 64
DSX320G		3.2	2.5	1.0	12 to 64	±30	±100	-40 to +125	8, 10 ,12	10 (200)	Ceramic	AE	65
		3.2	2.5	1.1	7.9 to 12								
DSX320GE		3.2	2.5	1.1	7.9 to 64	±30	±100	-40 to +125	8, 10 ,12	10 (200)	Ceramic	AE	65
DSX321G		3.2	2.5	0.9	12 to 64	±20 ±30	±30 ±100	-30 to +85 -40 to +125	8, 10 ,12	10 (200)	Ceramic	CE IE TC AE	22 65
		3.2	2.5	1.0	7.9 to 12								
DSX321GK		3.2	2.5	1.0	9.8 to 40	±30	±100	-40 to +125	8, 10 ,12	10 (200)	Ceramic	AE	65
DSX530GA		5.0	3.2	1.2	7 to 54/45 to 80 7 to 54	±30	±50 ±100	-30 to +85 -40 to +125	8, 10 ,12	10 (300)/10 (500) 10 (300)	Ceramic	CE IE AE	23 66
DSX530GK		5.0	3.2	1.2	8 to 54	±30	±100	-40 to +125	8, 10 ,12	10 (300)	Ceramic	AE	66
SMD-49		11.0	4.6	4.5	4, 8	±30	±100	-40 to +125	8, 10 ,12	10 (300)	Metal	AE	69

SMD Crystal Resonators with dedicated temperature sensor / MHz Band Crystal Resonators

Type	Actual Size	Size (mm) L	W	H (max.)	Frequency Range (MHz)	Frequency Tolerance (×10⁻⁶) @+25℃	Frequency Characteristics over Temperature (×10⁻⁶)	Operating Temperature Range (℃)	Load Capacitance (pF)	Drive Level (μw(max.))	Lid	Recommended Application	Catalog Page
DSR1210ATH		1.2	1.0	0.55	38.4, 76.8	±10	±12	-30 to +85	6, 7, 8	10 (100)	Metal	TC	24
DSR1612ATH		1.6	1.2	0.65	38.4, 52, 76.8 38.4	±10	±12 ±30	-30 to +85 -40 to +105	6, 7, 8 7, 8	10 (100)	Metal	TC AE	24 25 68
DSR1612STH		1.6	1.2	0.65	38.4	±10	±12	-30 to +85	6, 7, 8	10 (100)	Metal	TC	
DSR211ATH		2.0	1.6	0.65	19.2	±10	±12 ±30	-30 to +85 -40 to +105	7, 8	10 (100)	Metal	TC AE	
DSR211STH		2.0	1.6	0.8 (0.65)	19.2, 26, (38.4, 55.2) 19.2, (38.4, 55.2)	±10	±12 ±30	-30 to +85 -40 to +105	7, 8	10 (100)	Metal	TC AE	
DSR221STH		2.5	2.0	1.0	19.2, 26 19.2	±10	±12 ±20	-30 to +85 -40 to +105	7, 8	10 (100)	Metal	TC AE	

SMD Tuning Fork Crystal Resonators / kHz Band Crystal Resonators

Type	Actual Size	Size (mm) L	W	H (max.)	Frequency Range (kHz)	Frequency Tolerance (×10⁻⁶) @+25℃	Series resistance (kΩ max.)	Operating Temperature Range (℃)	Load Capacitance (pF)	Drive Level (μw(max.))	Package	Recommended Application	Catalog Page
DST1210A		1.25	1.05	0.35	32.768	±20	80	-40 to +85	7, 9, 12.5	0.1 (0.2)	Ceramic	CE TC	26
DST1610A		1.6	1.0	0.5			50 120	-40 to +85 -40 to +125	4, 6, 7, 9, 12.5	0.1 (0.5)		CE TC AE	27 70
DST1610AL		1.6	1.0	0.35			80	-40 to +85				CE TC	27
DST210AC		2.0	1.2	0.55			80 120	-40 to +85 -40 to +125				CE TC AE	27 70
DST310S		3.2	1.5	0.85			50 80, 120	-40 to +85 -40 to +125	7, 9, 12.5	0.2 (1.0)	Ceramic	CE IE TC AE	28 70
DST311S							50	-40 to +85				CE IE TC	28
DMX-26S		8.0	3.8	2.5	30 to 90	±20	50 50, 80	-40 to +85 -40 to +125	7, 9, 12.5	1.0 (2.0)	Plastic	CE AE	29 71

Tuning Fork Crystal Resonators / kHz Band Crystal Resonators

Type	Actual Size	Size (mm) L	W	H (max.)	Frequency Range (kHz)	Frequency Tolerance (×10⁻⁶) @+25℃	Series resistance (kΩ max.)	Operating Temperature Range (℃)	Load Capacitance (pF)	Drive Level (μw(max.))	Package	Recommended Application	Catalog Page
DT-26		ϕ2.0	ϕ2.0	6.0	32.768	±20	40	-10 to +60	12.5	1.0 (2.0)	Cylinder	CE IE	30
DT-261					28 to 90								
DT-38		ϕ3.0	ϕ3.0	8.0	32.768		30						
DT-381					20 to 90								

Monolithic Crystal Filters

Scan the QR code to check the table of contents page of our web site "Monolithic Crystal Filters" (URL: https://www.kds.info/class/3-l-cf/).

Icons IE Industrial Equipment TC Mobile Phone, Wireless Communication

Monolithic Crystal Filters

Type	Actual Size	Size (mm)			Frequency Range (MHz)	Operating Temperature Range (℃)	Overtone Order	Pole	Pass Bandwidth (kHz min./3dB)	Recommended Application	Catalog Page
		L	W	H (max.)							
DSF334SAF		3.0	3.0	1.1	45 to 130	-20 to +70	Fundamental	2	±3.5, ±7.5, ±15	TC	88
DSF334SAO					100 to 160		3rd				
DSF334SCF					60 to 130		Fundamental	3			
DSF444SAF		3.8	3.8	1.1	40 to 130		Fundamental	2			
DSF444SAO					100 to 160		3rd				
DSF444SCF					60 to 130		Fundamental	3			
DSF444SCO					100 to 160		3rd				
DSF633SDF		6.0	3.5	1.3	37 to 130	-20 to +70	Fundamental	4	±3.5, ±7.5, ±15	IE TC	89
DSF753SAF		7.0	5.0	1.5	16 to 90	-20 to +70	Fundamental	2	±3.5, ±7.5, ±15	IE TC	90
DSF753SAO					60 to 160		3rd				
DSF753SCF					20 to 130		Fundamental	3			
DSF753SCO					90 to 160		3rd				
DSF753SBF					30 to 70		Fundamental	4			
DSF753SDF					20 to 130						

Crystal Oscillators

Scan the QR code to check the table of contents page of our web site "Crystal Oscillators" (URL: https://www.kds.info/class/2-l-co/).

Icons VC Voltage Control Function Stb Stand-by Function 2OP Two Output Function
CE Consumer Equipment IE Industrial Equipment TC Mobile Phone, Wireless Communication AE Automotive Electronics

Temperature Compensated Crystal Oscillators (TCXO/VC-TCXO)

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	Frequency Characteristics over Temperature (×10⁻⁶)	Operating Temperature Range (℃)	Supply Voltage (V)	Function	Recommended Application	Catalog Page
DSA1612SDN		1.6	1.2	0.55	CS	16 to 60	±1.0 ±0.5	-40 to +85	+1.68 to +3.5	VC	IE TC AE	36, 37 80, 81
DSB1612SDN							±0.5					
DSB1612WA				0.45		26, 38.4, 52					IE TC	35
DSB1612WEB				0.55		24 to 104			+1.68 to +3.63	Stb	TC	38
DSA211SDN		2.0	1.6	0.8		12.288 to 52	±1.0 ±0.5		+1.68 to +3.5	VC		
DSB211SDN							±0.5					
DSA221SDN		2.5	2.0	0.9		9.6 to 52	±1.0 ±0.5			VC	IE TC AE	36, 37 80, 81
DSB221SDN							±0.5					
DSA321SDN		3.2	2.5	1.0			±1.0 ±0.5			VC		
DSB321SDN							±0.5					
DSB211SJA		2.0	1.6	0.8	CMOS	13 to 52	±5.0	-40 to+105	+1.7 to +3.6	Stb	IE TC AE	40•82
DSA211SP		2.0	1.6	0.7	CS	12.288 to 52	±1.0	-40 to+105	+1.68 to +3.5	VC	AE	79
DSB211SP							±0.5					
DSB211SPX		2.0	1.6	0.8		13 to 52			+1.68 to +3.63	Stb		78
DSA535SGA		5.0	3.2	1.5	CS or CMOS	10 to 52	±0.05	-40 to +85	+2.3 to +3.63	VC Stb	IE TC	39
DSB535SGA										Stb		

Clock Oscillators (SPXO)

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA)	Recommended Application	Catalog Page
DS1008JN		1.05	0.85	0.24	CMOS	1.0 to 100	±50	-40 to +125	+0.8 to +1.6	1.9	CE TC	8
DS1008JS		1.05	0.85	0.24	CMOS	1.0 to 100	±50	-40 to +125	+1.6 to +3.3	1.8	CE TC	9
DSO1612AR		1.6	1.2	0.58	CMOS	0.584375 to 80	±50 ±100	-40 to +85 -40 to +125	+1.6 to +3.6	1.4 to 3.8	CE TC AE	45 72
DSO221SR		2.5	2.0	0.895	CMOS	0.2 to 167	±50 ±100	-40 to +85 -40 to +125	+1.6 to +3.6	1.0 to 8.0 2.5 to 8.0	CE TC AE	46, 47 73
DSO321SR		3.2	2.5	1.2								
DSO531SR		5.0	3.2	1.2								
DSO751SR		7.3	4.9	1.7								
DSO221SBM		2.5	2.0	0.895		3.25 to 52	±50	-40 to +85	+5.0	8.0	CE IE	44
DSO321SBM		3.2	2.5	1.2		0.7 to 90				4.0 to 8.0		
DSO531SBM		5.0	3.2	1.2					+5.0	4.0 to 8.0		
DSO751SBM		7.3	4.9	1.7					+5.0	4.0 to 8.0		
DSO211SX		2.0	1.6	0.8	CMOS	1.0 to 125	±50	-40 to +125	+1.6 to +3.6	1.7 to 10.0	AE	74
DSO221SX		2.5	2.0	0.9								
DSO211SXF		2.0	1.6	0.8	CMOS	1.0 to 125	±50	-40 to +125	+1.6 to +3.6	1.7 to 10.0	CE TC	48
DSO221SXF		2.5	2.0	0.9								
DSO221SY		2.5	2.0	0.895	CMOS	1.049 to 8.5	±35 ±50	-40 to +85	+1.6 to +3.6	0.7	CE TC AE	50 76
DSO321SY		3.2	2.5	1.2								
DLO555MBA	–	5.0	4.0	5.0	CMOS	0.75 to 54	±50, ±100	-10 to +85	+1.6 to +5.5	8.0	IE	54

Low Phase Noise Crystal Oscillators (SPXO)

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA)	Recommended Application	Catalog Page
DSO221SH		2.5	2.0	0.895	CMOS	3.5 to 52	±50	-40 to +85	+1.6 to +3.6	2.3 to 4.2	CE TC	42
DSO321SH		3.2	2.5	1.2								
DSO531SHH		5.0	3.2	1.2	CMOS	20 to 50	±50	-40 to +85	+1.62 to +3.6	2.9 to 7.7	CE TC	43

Differential Output Crystal Oscillators (SPXO)

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA)	Recommended Application	Catalog Page
DS1008JC		1.05	0.85	0.26	HD-LVDS	156.25	±100	-40 to +85℃	+3.3	30	IE	10
DS1008JK					LV-PECL				+2,5, +3.3	45		
DS1008JJ					LVDS					20		
DSO223SD		2.5	2.0	0.95	HCSL	13.5 to 167	±50 ±80	-40 to +85 -40 to +105	+2.5, +3.3	30	CE IE TC AE	51 77
DSO223SJ					LVDS					20		
DSO223SK					LV-PECL					45		
DSO323SD		3.2	2.5	1.2	HCSL	13.5 to 212.5 13.5 to 167				35 30		
DSO323SJ					LVDS					20		
DSO323SK					LV-PECL					50 45		
DSO533SJ		5.0	3.2	1.2	LVDS	13.5 to 212.5	±50	-40 to +85	+2.5, +3.3	20	CE IE TC	52
DSO533SK					LV-PECL					50		
DSO753SD		7.3	4.9	1.7	HCSL					35	CE IE	53
DSO753SJ					LVDS					20		
DSO753SK					LV-PECL					50		

Voltage Controlled Crystal Oscillators (VCXO)

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Frequency Adjustment Range (×10⁻⁶)	Supply Voltage (V)	Current Consumption (mA)	Recommended Application	Catalog Page
DSV321SV		3.2	2.5	1.2	CMOS	6.75 to 90	±40	-30 to +85	±125	+2.8, +3.3	3.0 to 12	CE	55
DSV323SV		3.2	2.5	1.2	CMOS	6.75 to 170	±50	-40 to +85	±100	+3.3	12, 25	CE TC	57
DSV531SV		5.0	3.2	1.4	CMOS	1.25 to 80	±50	-10 to +70	±100	+3.3	10, 15	CE	56
DSV753SV		7.3	4.9	1.7	CMOS	2.0 to 170	±50	-40 to +85	±100	+3.3	12, 25	CE	58

Differential Output Voltage Controlled Crystal Oscillators (VCXO)

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Frequency Adjustment Range (×10⁻⁶)	Supply Voltage (V)	Current Consumption (mA)	Recommended Application	Catalog Page
DSV323SD		3.2	2.5	1.2	HCSL	80 to 170	±50	-40 to +85	±100	+3.3	40	CE TC	57
DSV323SJ					LVDS						30		
DSV323SK					LV-PECL						50		
DSV753SD		7.3	4.9	1.7	HCSL						40	CE	58
DSV753SJ					LVDS						30		
DSV753SK					LV-PECL						50		

kHz Band TCXO

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (kHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (μA)	Temperature Compensated Type	Recommended Application	Catalog Page
DSK1612ATD		1.6	1.2	0.65	CMOS	32.768	±5.0	-40 to +85	+1.5 to +3.63	3,2 to 3.5	Digital	CE IE AE	41, 83

kHz Band SPXO

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	FrequencyTolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (μA)	Recommended Application	Catalog Page
DSO1612AR (kHz)		1.6	1.2	0.6	CMOS	32.768	±100	-40 to +125	+1.6 to +3.6	32	CE TC	49
DSO221SR (kHz)		2.5	2.0	0.895	CMOS	32.768 to 50	±100	-40 to +125	+1.6 to +5.5	65 to 120	AE	75
DSO321SR (kHz)		3.2	2.5	1.2								
DSO221SY (kHz)		2.5	2.0	0.895	CMOS	32.768	±35 ±50	-40 to +85	+1.6 to +3.6	18	CE TC AE	50 76
DSO321SY (kHz)		3.2	2.5	1.2								

MEMS Oscillators

Scan the QR code to check the table of contents page of our web site "MEMS Oscillators" (URL: https://www.kds.info/class/4-l-mems/).

Icons CE Consumer Equipment IE Industrial Equipment TC Mobile Phone, Wireless Communication

kHz Band MEMS Oscillator

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (kHz)	Frequency Characteristics over Temperature (×10⁻⁶)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (μA typ.)	Recommended Application	Catalog Page
MO1532		1.5	0.8	0.6	NanoDrive™ LVCMOS	32.768	±100	-40 to +85	+1.2 to +3.63	+0.90	CE TC	93
MO1534		1.5	0.8	0.6	NanoDrive™ LVCMOS	0.001 to 32.768	±100	-40 to +85	+1.2 to +3.63	+0.90	CE TC	94
		2.0	1.2	0.6								
MO1569		1.5	0.8	0.6	LVCMOS	0.001 to 462	±50	-40 to +85	+1.62 to +3.63	+2.0 μA (100kHz)	CE TC	
MO1630		2.0	1.2	0.6	LVCMOS	16.384, 32.768	±150	-40 to +105	+1.5 to +3.63	+1.00	CE TC	93

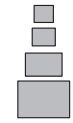
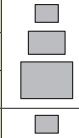
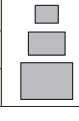
kHz Band Temperature Compensated MEMS Oscillators

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (kHz)	Frequency Characteristics over Temperature (×10⁻⁶)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (μA typ.)	Recommended Application	Catalog Page
MO1552		1.5	0.8	0.6	NanoDrive™ LVCMOS	32.768	±5/±10/±20 over temp.	-40 to +85	+1.5 to +3.63	+0.99	CE TC	93
MO1566					LVCMOS		±3 all inclusive		+1.8	+4.5		
MO1568							±5 all inclusive After Overmold/ Underfill					
MO1576					LVCMOS	0.001 to 2000	±5 all inclusive	-40 to +85	+1.62 to +3.63	+8.0 μA (100kHz)	CE TC	94

Low Power MEMS Oscillators

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	Frequency Tolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA typ.)	Recommended Application	Catalog Page
MO8021		1.5	0.8	0.6	LVCMOS	1.0 to 26	±100	-40 to +85	+1.62 to +1.98, +2.25 to +3.63	+0.006 to +0.34 (+0.9 μA stby)	CE TC	94

Low Phase Jitter MEMS Oscillators

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	Frequency Tolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA typ.)	Recommended Application	Catalog Page
MO8208		2.7 3.2 5.0	2.4 2.5 3.2	0.8 0.8 0.8	LVCMOS	1.0 to 80	±10, ±20, ±25, ±50	-40 to +85	+2.25 to +3.63	+29 to +36 (+10 μA stby)	CE IE	96
MO8209		7.0	5.0	1.0		80 to 220						
MO9120		3.2	2.5	0.8	LVPECL LVDS	25 to 212.5	±10, ±20, ±25, ±50	-40 to +85	+2.25 to +3.63	+54 to +69	CE IE	
MO9121		5.0	3.2	0.8		1.0 to 220						
MO9122		7.0	5.0	1.0		220 to 625						
MO9365		3.2	2.5	0.8	LVPECL LVDS HCSL	32 Standard Frequencies	±10, ±20, ±25, ±50	-40 to +105	+2.25 to +3.63	+76 to +84	CE IE	95
MO9366		5.0	3.2	0.8		1.0 to 220						
MO9367		7.0	5.0	1.0		220 to 725						

Temperature Compensated MEMS Oscillators

Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	Frequency Characteristics over Temperature (×10⁻⁶)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA typ.)	Recommended Application	Catalog Page
MO5155		5.0	3.2	1.0	Clipped Sinewave (1 to 60 MHz) LVCMOS	10 std. GNSS Freq.	±0.5, ±1.0, ±2.5	-40 to +105℃	+2.25 to +3.63	+40 to +50	CE IE	97
MO5156						1.0 to 60						
MO5157						60 to 220						
MO5356						1.0 to 60	±0.1, ±0.2, ±0.25					
MO5357						60 to 220						
MO5358					Clipped Sinewave, LVCMOS	1.0 to 60	±0.05	0 to +70℃				
MO5359					LVCMOS	60 to 189, 200 to 220						

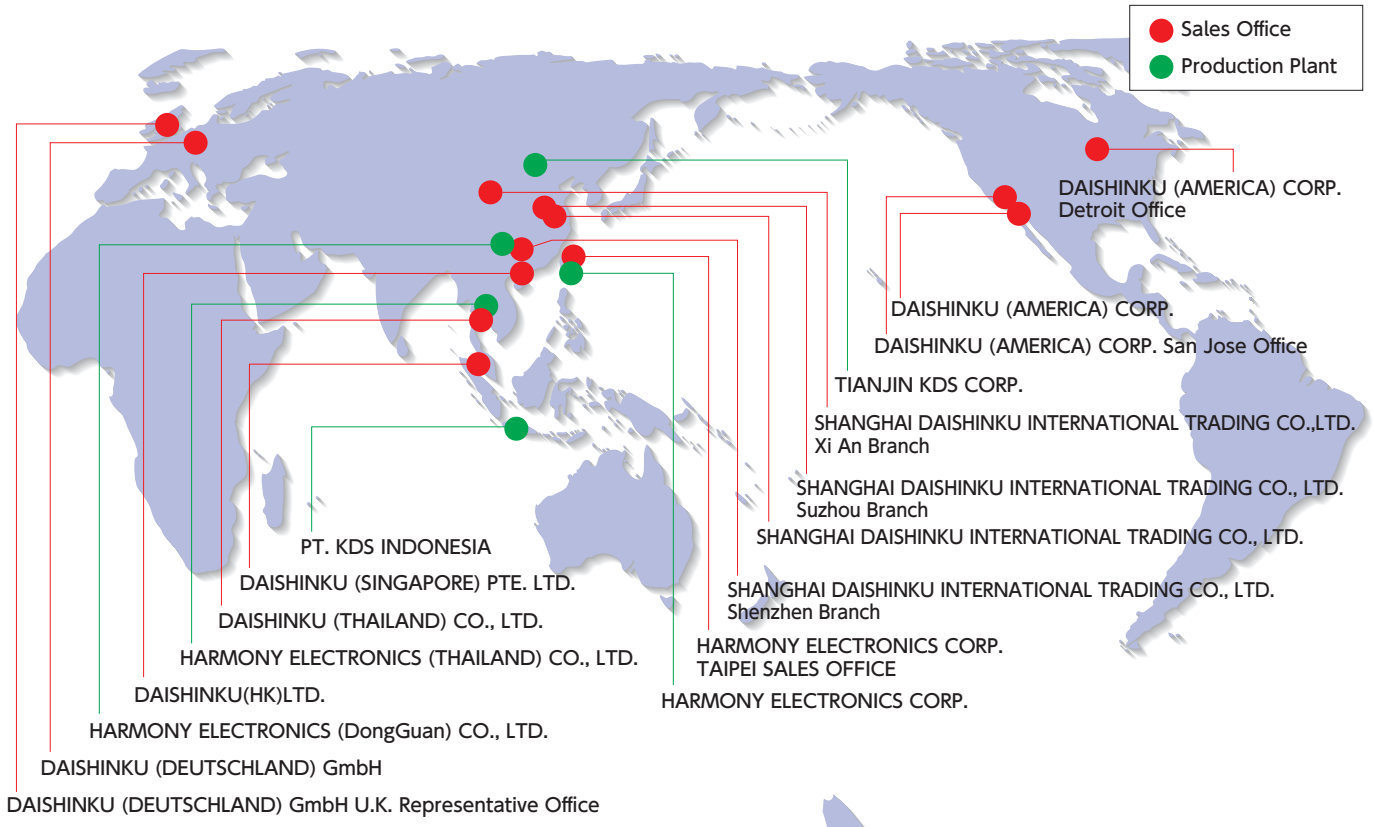
MEMS Oscillators with Spread Spectrum Function

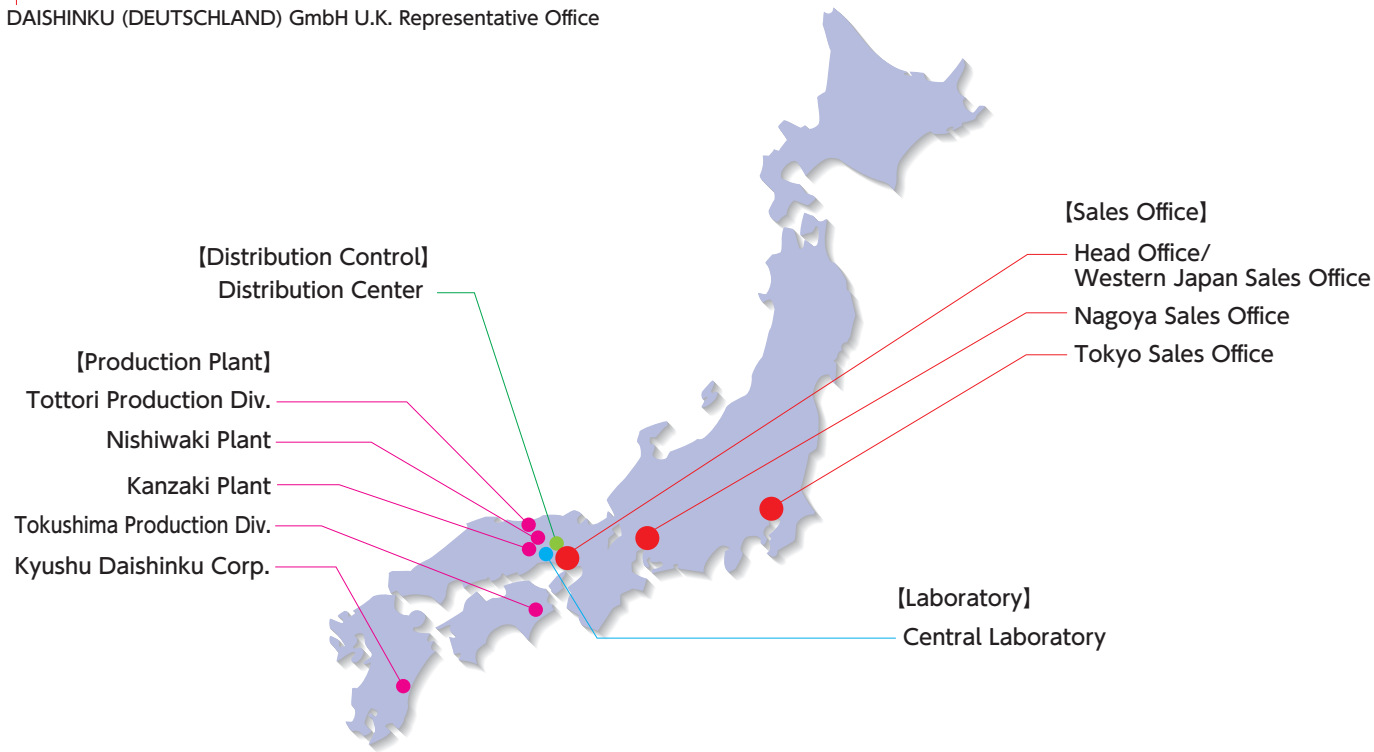
Type	Actual Size	Size (mm) L	W	H (max.)	Output	Frequency Range (MHz)	Frequency Tolerance (×10⁻⁶) (Includes frequency tolerance at room temperature.)	Operating Temperature Range (℃)	Supply Voltage (V)	Current Consumption (mA typ.)	Recommended Application	Catalog Page
MO9002		5.0	3.2	0.8	LVPECL LVDS CML HCSL	1.0 to 220	±25, ±50	-40 to +85	+1.71 to +1.89, +2.25 to +3.63	+48 to +75	CE IE	98
		7.0	5.0	1.0								
MO9003		2.5	2.0	0.8	LVCMOS	1.0 to 110	±50, ±100			+3.2 to +4.1 (+0.4 to +4.3 μA stby)		
		3.2	2.5	0.8								
		5.0	3.2	0.8								
		7.0	5.0	1.0								
MO9005		2.0	1.6	0.8		1.0 to 141	±20, ±25, ±50		+1.62 to +1.98, +2.25 to +3.63	+5.0 to +6.5 (+0.4 to +4.3 μA stby)		
		2.5	2.0	0.8								
		3.2	2.5	0.8								

KDS Global Network

Our global network accelerates our business.

All KDS business bases are connected through a global network via host computers. This network allows for online and real-time networking, thus maximizing time efficiency and ensures our promptness. This network maintains our quality standards through the control of production at our plants, product transport from/to the distribution center, and our sales information. In the best interest of our customers we continuously aim to deliver our quality services to the world market.





General Manufacturer of Quartz Devices

株式会社 大真空
DAISHINKU CORP.

https://www.kds.info

Broadband Technology 2000

UK Enquiries:
01189 324600
sales@bt2000.co.uk

本　　社：〒675-0194
兵庫県加古川市平岡町新在家1389
TEL.(079)426-3211／FAX.(079)426-8618
営業本部/西日本営業所：TEL.(079)425-3161／FAX.(079)425-1134
韓　国　営　業：TEL.(079)425-3141／FAX.(079)425-1134
東 京 営 業 所：〒140-0013
東京都品川区南大井3-28-3 大森プラザビル6F
TEL.(03)6404-3900／FAX.(03)6404-3901
名 古 屋 営 業 所：〒461-0001
愛知県名古屋市東区泉1-13-25 セントラルアートビル7F
TEL.(052)973-1661／FAX.(052)973-1662

HEAD OFFICE
1389 Shinzaike, Hiraoka-cho, Kakogawa, Hyogo 675-0194 Japan
TEL:+81-79-426-3211　FAX:+81-79-426-8618

Marketing & Sales Div./Western Japan Sales Office
TEL:+81-79-425-3161　FAX:+81-79-425-1134

KOREA SALES SEC.
TEL:+81-79-425-3141　FAX:+81-79-425-1134

TOKYO SALES OFFICE
6F, 3-28-3 Minamioi, Shinagawa-ku, Tokyo 140-0013 Japan
TEL:+81-3-6404-3900　FAX:+81-3-6404-3901

NAGOYA SALES OFFICE
7F, 1-13-25 Izumi, Higashi-ku, Nagoya, Aichi 461-0001 Japan
TEL:+81-52-973-1661　FAX:+81-52-973-1662

DAISHINKU (AMERICA) CORP.
17800 Newhope Street Suite F, Fountain Valley, CA 92708 U.S.A.
TEL:+1-714-641-2600　FAX:+1-714-641-2606

DAISHINKU (AMERICA) CORP. San Jose Office
2033 Gateway Place, Suite 500 San Jose, CA 95110 U.S.A.
TEL:+1-678-575-8795

DAISHINKU (AMERICA) CORP. Detroit Office
42705 Grand River, Suite 201, Novi, MI 48375-4175 U.S.A.
TEL:+1-714-600-0034

DAISHINKU (DEUTSCHLAND) GmbH
Wiesenstrasse 70A2 40549 Düsseldorf, F.R. Germany
TEL:+49-211-506530-0　FAX:+49-211-596054

DAISHINKU (DEUTSCHLAND) GmbH U.K. Representative Office
Brook House, 54a Cowley Mill Road, Uxbridge, Middlesex, UB8 2QE, U.K.
TEL:+44-20-3405-4913

DAISHINKU (SINGAPORE) PTE. LTD.
12 Little Road, #03-01, Lian Cheong Industrial Building, Singapore 536986
TEL:+65-6286-7646　FAX:+65-6382-5394

DAISHINKU (THAILAND) CO., LTD.
2098 M Tower, 2nd Floor, Room 204-205, Sukhumvit Road, Phra Khanong Tai Sub-district, Phra Khanong District, Bangkok 10260 Thailand
TEL:+66-2-391-3291　FAX:+66-2-391-3292

DAISHINKU (HK) LTD.
Units 1-2, 22/F., Futura Plaza, 111-113 How Ming Street, Kwun Tong, Kowloon, Hong Kong
TEL:+852-2330-2541　FAX:+852-2765-6673

SHANGHAI DAISHINKU INTERNATIONAL TRADING CO., LTD.
906, 1#, No.641, Tianshan Road, Shanghai 200336 China
TEL:+86-21-6236-8701　FAX:+86-21-6236-8707

SHANGHAI DAISHINKU INTERNATIONAL TRADING CO., LTD. Suzhou Branch
Room 1216, Gold River International Center, 88 Shishan Road, high-tech zone, Suzhou, China
TEL:+86-512-6827-0470　FAX:+86-512-6827-0455

SHANGHAI DAISHINKU INTERNATIONAL TRADING CO., LTD. Shenzhen Branch
Room 2404, Building 1, Shenzhen Huarong Building, Mintian Road, Futian District, Shenzhen, China
TEL:+86-755-8831-6813　FAX:+86-755-8831-6812

SHANGHAI DAISHINKU INTERNATIONAL TRADING CO., LTD. Xi An Branch
Room 11533.Building A, Hua Qi International Plaza, No.99, Middle Changan Road, Yanta District, Xi'an, China
TEL:+86-29-8154-1730　FAX:+86-29-8154-1731

HARMONY ELECTRONICS CORP. TAIPEI SALES OFFICE
5F NO.80, Zhouzi Street, Neihu District, Taipei City, Taiwan 114064
TEL:+886-2-2658-8883　FAX:+886-2-2658-8683

VEGETABLE OIL INK

2021.10