



Crystal Unit / Resonator

▶ kHz Range Crystal Unit (Tuning fork)

Page	Model	Actual size (mm)	t Max.	Frequency				
				20 kHz	32 kHz	100 kHz	200 kHz	300 kHz
4	FC-12M		2.05×1.2×0.6 t		32 kHz	77.5 kHz		
5	FC-13D	NEW	3.2×1.5×0.38 t		● 32.768 kHz			
	FC-13E		3.2×1.5×0.48 t		● 32.768 kHz			
6	FC-13A	NEW	3.2×1.5×0.9 t		● 32.768 kHz			
7	FC-13F		3.2×1.5×0.6 t		● 32.768 kHz			
	FC-135		3.2×1.5×0.9 t	32 kHz		77.5 kHz		
8	FC-145		4.1×1.5×0.9 t		● 32.768 kHz			
	FC-255		4.9×1.8×0.9 t					
9	MC-146		7.0×1.5×1.4 t		32 kHz		100 kHz	
	MC-156		7.1×3.3×1.5 t					
10	MC-306		8.0×3.8×2.54 t	20 kHz				165 kHz
	MC-405/406		10.41×4.06×3.6 t	20 kHz				165 kHz
11	MC-30A		8.0×3.8×2.54 t	20 kHz				165 kHz
12	C-001R		Φ3.1					
	C-002RX		Φ2.0					
	C-004R		Φ1.5		● 32.768 kHz			
	C-005R		Φ1.2					
	C-2-TYPE		Φ2.0	20 kHz				165 kHz
	C-4-TYPE		Φ1.5		32 kHz		120 kHz	● 192 kHz

▶ MHz Range Crystal Unit (AT)

Page	Model	Actual size (mm)	t Max.	Frequency			
				1 MHz	10 MHz	20 MHz	64 MHz
13	FA-118T	NEW	1.6×1.2×0.35 t			24 MHz	54 MHz
14	FA-128		2.0×1.6×0.5 t			24 MHz	54 MHz
15	FA-20H		2.5×2.0×0.55 t		12 MHz		48 MHz
16	FA-238V		3.2×2.5×0.7 t		12 MHz	15.999 MHz	
	FA-238		3.2×2.5×0.7 t		16 MHz		60 MHz
	TSX-3225		3.2×2.5×0.6 t		16 MHz		48 MHz
17	FA-365		6.0×3.5×1.4 t		● 12 MHz		
18	MA-306		8.0×3.8×2.54 t		14 MHz		41 MHz
					● 14.31818 MHz		
19	MA-406		11.7×4.8×3.7 t		17.734 MHz		41 MHz
	MA-505/506		13.46×5.08×4.6 t	4 MHz			64 MHz*
20	CA-301		Φ3.1				

* 8.0 MHz < f_{nom} < 8.2 MHz : Unavailable.
Available frequencies from: 4 MHz to less than 5.5 MHz (4 MHz, 4.032 MHz, 4.096 MHz, 4.19 MHz, 4.194304 MHz, 4.433619 MHz, 4.5 MHz, 4.8 MHz, 4.9152 MHz)

▶ Resonator (SAW)

Page	Model	Actual size (mm)	t Typ.	Frequency			
				200 MHz	500 MHz	700 MHz	1 GHz
21	NS-21R		2.5×2.0×0.86 t	300 MHz		500 MHz	
22	NS-32R		3.8×3.8×0.98 t	312 MHz			870 MHz
	FS-335		3.8×3.8×0.98 t	300 MHz			870 MHz
	FS-555		4.8×5.2×1.5 t	230 MHz		500 MHz	
23	FS-585		4.8×5.2×1.5 t	300 MHz		500 MHz	