

Quartz Crystal Units

Example part number:

CM309S20.000000MABATR

CM309S

20.000000M

A

B

A

TR

Product Family

For example:

CFS308
CFS206
CFS145
CFV308
CFV206
CSA310
CSA309
HC49US
HCM49
CM100S
CM200S
CM201
CM202
CM250S
CM309S
CM309A
CM309B
CS20
CS10

Frequency

Numerical value, maximum characters as follows:
XX.XXXXXX followed by
"M" for MHz or "K" for KHz.

Packaging method

TR Tape & Reel (Minimum size depends on product family - see catalog)
B Bulk (Bags for through-hole, tubes or tape for SMT)

Load Capacitance

A	Series	L	22.0 pf
B	6.0 pf	M	25.0 pf
C	9.0 pf	N	30.0 pf
D	9.5 pf	O	32.0 pf
E	12.0 pf	P	33.0 pf
F	12.5 pf	Q	10.0 pf
G	13.0 pf	R	50.0 pf
H	15.0 pf	S	11.0 pf
I	16.0 pf	T	14.0 pf
J	18.0 pf		
K	20.0 pf		

...others to be assigned

Frequency Stability (at Operating Temp.)

Frequencies in MHz

A	+/-30ppm (-10 to +60C)	*	O	+/-30ppm (-20 to +70C)
B	+/-50ppm (-10 to +60C)	(standard)	P	+/-40ppm (-20 to +70C)
C	+/-100ppm (-10 to +60C)	*	Q	+/-50ppm (-20 to +70C)
D	+/-20ppm (-10 to +60C)	*	R	+/-60ppm (-20 to +70C)
E	+/-10ppm (-10 to +60C)	*	S	+/-70ppm (-20 to +70C)
F	+/-30ppm (-40 to +85C)	*	T	+/-80ppm (-20 to +70C)
G	+/-50ppm (-40 to +85C)	*	U	+/-80ppm (-40 to +100C)
H	+/-100ppm (-40 to +85C)	*	V	+/-100ppm (-40 to +100C)
I	+/-20ppm (-40 to +85C)	*	W	+/-150ppm (-40 to +100C)
J	+/-10ppm (-40 to +85C)	*	X	+/-200ppm (-40 to +100C)
K	+/-150ppm (-40 to +85C)	*		
L	+/-200ppm (-40 to +85C)	*		
M	+/-60ppm (-40 to +85C)	*		
N	+/-80ppm (-40 to +85C)	*		

Frequencies in KHz

Z Standard Specs. (standard)

* other than standard, consult factory.

Frequency Tolerance (at 25C)

A	+/-30ppm (standard)	MHz	F	+/-15ppm
B	+/-50ppm (standard)	MHz	G	+/-25ppm
C	+/-100ppm *			
D	+/-20ppm (standard)	32.768KHz		
E	+/-10ppm *			

* other than standard, consult factory.

Crystal Clock Oscillators

Example part number:

CMX309FBC25.333333MTR

CMX309 **FB** **C** **25.333333M** **TR**

Product Family
For example :
CMX-309
CSX-750

Packaging method
TR Tape & Reel (Minimum size depends on product family - see catalog)
B Bulk (Bags for through-hole, tubes or tape for SMT)

Frequency
Numerical value, max. characters as follows: **XX.XXXXXX** followed by "M" for MHz.

Frequency Tolerance (at Operating Temp.)
B +/-50ppm (-10 to +70C) (standard)
C +/-100ppm (-10 to +70C) (standard)
F +/-100ppm (-40 to +85C) (consult factory)
G +/-200ppm (-40 to +85C) (consult factory)

	Frequency Range	Supply Voltage	Load Condition	Duty Cycle		
FL	1.000 - 30.000 MHz	5V	10TTL 50pf CMOS	45-55% 40-60%	(Fundamental)	(standard)
FS	1.000 - 30.000 MHz	5V	10TTL 50PF CMOS	40-60% 45-55%	(Fundamental)	
HW	30.001 - 50.040 MHz	5V	10TTL 50pf CMOS	45-55% 40-60%	(Overtone)	(standard)
HS	30.001 - 50.040 MHz	5V	10TTL 50PF CMOS	40-60% 45-55%	(Overtone)	
HC	50.100 - 66.667 MHz	5V	50pf CMOS	40-60%	(Overtone)	(standard)
HT	50.100 - 66.667 MHz	5V	5TTL	45-55%	(Overtone)	(standard)
FB	1.000 - 30.000 MHz	3V	30pf CMOS	40-60%	(Fundamental)	(standard)
FA	1.000 - 30.000 MHz	3V	30pf CMOS	45-55%	(Fundamental)	
HB	30.001 - 50.040 MHz	3V	30pf CMOS	40-60%	(Overtone)	(standard)
HA	30.001 - 50.040 MHz	3V	30pf CMOS	45-55%	(Overtone)	