



*Part
Numbering
System*

Quartz Crystal Units

Exsample Part Number:

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
- CMR200TA/B
- CMR250TA/B
- CMR309T
- CMR310T
- CM155
- CM130
- CSD35B

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	I	16.0 pf	Q	10.0 pf
B	6.0 pf	J	18.0 pf	R	50.0 pf
C	9.0 pf	K	20.0 pf	S	11.0 pf
D	9.5 pf	L	22.0 pf	T	14.0 pf
E	12.0 pf	M	25.0 pf	U	17.0 pf
F	12.5 pf	N	30.0 pf	V	8.0 pf
G	13.0 pf	O	32.0 pf		
H	15.0 pf	P	33.0 pf		

...others to be assigned

Frequency Tolerance (at Operating Temp.)

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

Frequency in KHz
Z Standard Specs (Standard)
• other than standard, consult factory.

Frequency Tolerance (at 25C)

Frequency in MHz			
A	+/-30ppm (Standard) MHz	E	+/-10ppm •
B	+/-50ppm (Standard) MHz	F	+/-15ppm •
C	+/-100ppm •	G	+/-25ppm •
D	+/-20ppm (Standard) 32.768 KHz		

• other than standard, consult factory.