



*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) • (Standard)	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.