



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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FEATURES

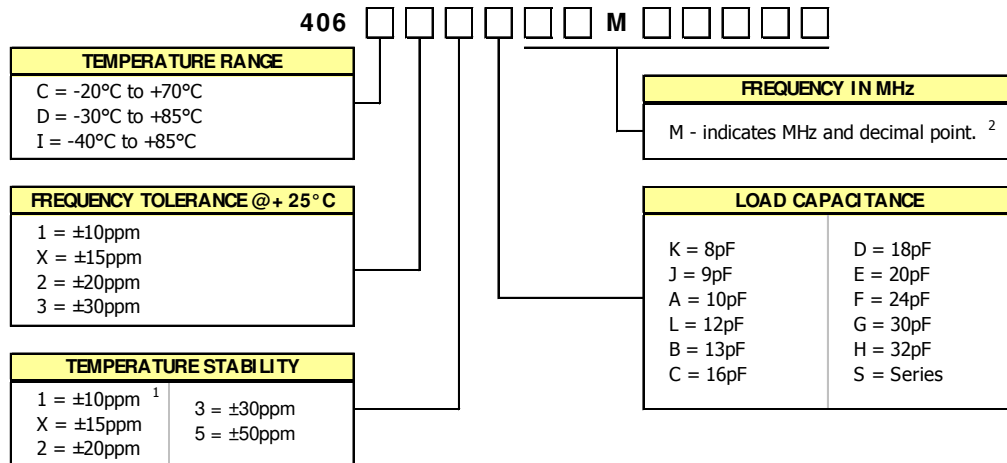
- Standard 6.0mm x 3.5mm Ceramic Surface Mount Package
- Fundamental Crystal Design
- Frequency Range 8 – 52MHz
- Frequency Tolerance, ± 30 ppm Standard
- Frequency Stability, ± 50 ppm Standard
- Operating Temperature to -40°C to $+85^{\circ}\text{C}$
- Stable Frequency Over Temperature and Drive Level
- Tape & Reel Packaging Standard, EIA-481
- RoHS/ Green Compliant [6/ 6]



APPLICATIONS

Model 406 is a seam sealed ceramic packaged quartz resonator offering excellent performance for a wide variety of applications including; wireless communications, broadband access, WLAN/WiMax/WIFI, test and measurement, portable equipment and computer peripherals.

ORDERING INFORMATION

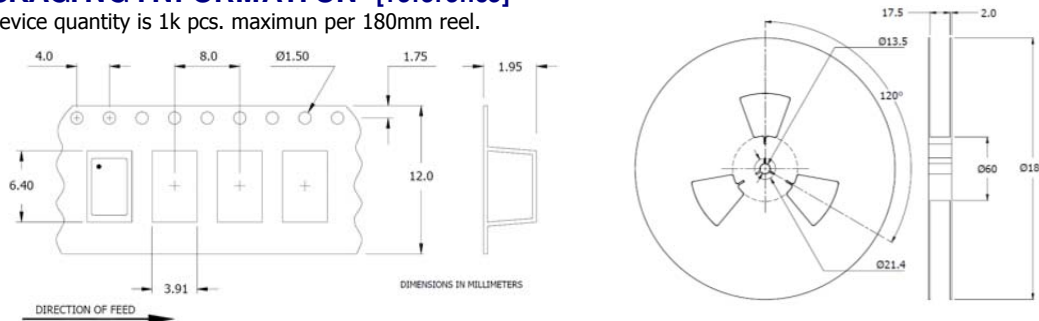


1. Available with temperature range codes C and D.
 2. Frequency is recorded with two leading digits before the 'M' and 5 significant digits after the 'M' [including zeros].
 [Ex. XXMXXXXX (16M38400), XXMXXXXX (14M31818)]

Not all performance combinations and frequencies may be available.
 Contact your local CTS Representative or CTS Customer Service for availability.

PACKAGING INFORMATION [reference]

Device quantity is 1k pcs. maximum per 180mm reel.

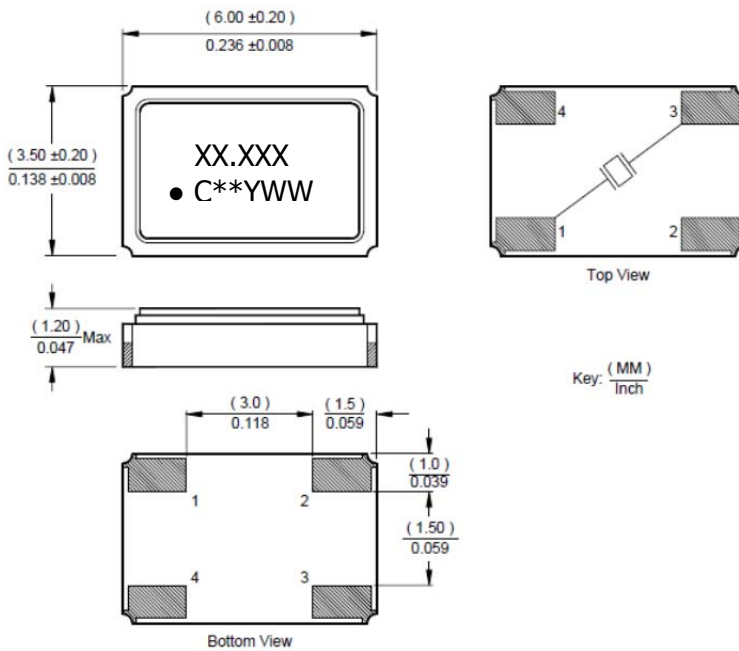


ELECTRICAL CHARACTERISTICS

PARAMETER		VALUE	
ELECTRICAL PARAMETERS	Frequency Range	8MHz to 52MHz	
	Operating Mode	Fundamental	
	Crystal Cut	AT-Cut	
	Frequency Tolerance @ +25°C	±30ppm, Standard	
	Frequency Stability Tolerance [Operating Temperature Range, Referenced to +25°C Reading]	±30ppm, Standard	
	Operating Temperature Ranges	-20°C to +70°C	
		-30°C to +85°C	-40°C to +85°C
	Equivalent Series Resistance [Maximum]	8MHz - <10MHz	70 Ohms
		10MHz - <20MHz	55 Ohms
		20MHz - <35MHz	45 Ohms
		35MHz - 54MHz	35 Ohms
	Load Capacitance	See Ordering Information	
	Shunt Capacitance [C ₀]	5.0pF Typical, 7.0pF Maximum	
	Drive Level	10µW Typ., 200µW Max.	
Aging @ +25°C	±3ppm/yr Typical		
Insulation Resistance	500M Ohms @ DC 100V		
Storage Temperature Range	-40°C to +100°C		

MECHANICAL SPECIFICATIONS

PACKAGE DRAWING



MARKING INFORMATION

1. XX.XXX – Frequency marked with 3 significant digits after the decimal.
2. C – CTS identifier.
3. ** – Manufacturing Site code.
4. YWW – Date Code, Y – Last Digit of Year, WW – Week.

NOTES

1. Complete CTS part number, frequency value and date code information must appear on reel and carton labels.
2. Terminations #2, #4 and metal lid are connected internally and may be connected to ground for EMI suppression.
3. Termination pads (e4); barrier plating is nickel Ni] with gold [Au] flash plate.
4. Reflow conditions per JEDEC J-STD-020; +260°C maximum, 10 seconds.
5. MSL = 1.

SUGGESTED SOLDER PAD GEOMETRY

