CTS ELECTRONIC COMPONENTS

PRODUCT CHANGE NOTIFICATION

PCN#: PCM-1211

PCN Date: 7 November 2006

Product Families Affected

Crystal Resonator: Model 407, Surface Mount Quartz Crystal

Reason For Change

In an effort to easily distinguish between Fundamental and Third Overtone mode crystals and accommodate three-digit frequency values (i.e. 100 MHz), CTS is modifying the catalog part number format for the Model 407 product family.

Description For Change

The current catalog part number format does not contain an identifier for the oscillation mode of the associated frequency and can only specify two-digit crystal frequencies (i.e. 99 MHz).

ORDERING INFORMATION

407 □ □ □ □ □ □ M □ □ □ □ □

OPERATING TEMPERATURE RANGE

C = -20°C to +70°C (standard)
I = -40°C to +85°C

FREQUENCY TOLERANCE @ 25°C

1 = ± 10 ppm
2 = ± 20 ppm
3 = ± 30 ppm (standard)

STABILITY TOLERANCE

Over Operating Temperature Range
(Referenced to 25°C Reading)

1 = ± 10 ppm **
2 = ± 20 ppm
3 = ± 30 ppm
4 = ± 40 ppm
5 = ± 50 ppm (standard)

** Limited to Standard Operating Temperature Range Only, Code C.

FREQUENCY IN MHz

M - indicates MHz and decimal point. Frequency is recorded with minimum 5 significant digits to the right of the "M".

LOAD CAPACITANCE

A = 10 pF	G = 30 pF
B = 13 pF	H = 32 pF
C = 16 pF	J = 9 pF
D = 18 pF	K = 8 pF
E = 20 pF	L = 12 pF
F = 24 pF	S = Series

Example Part Numbers:
407C35A14M31818
407I35A32M00000

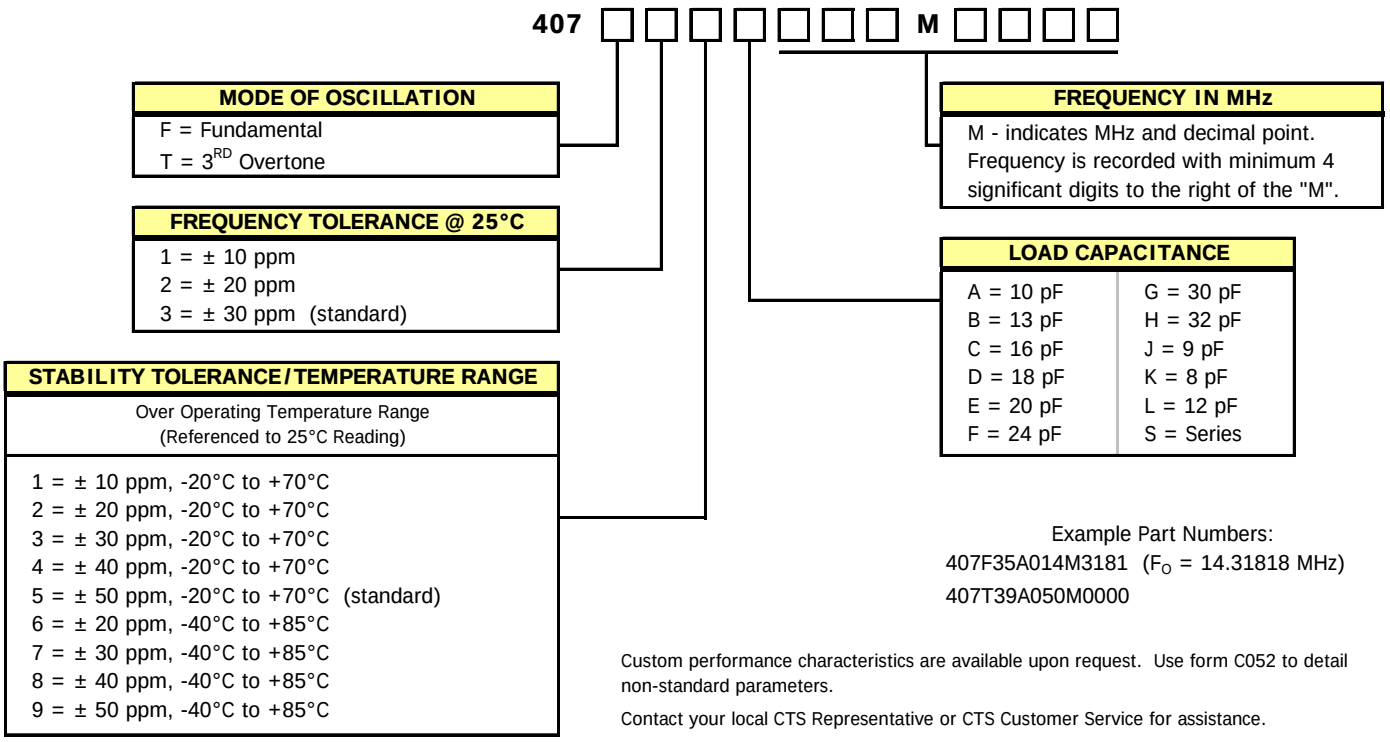
Custom performance characteristics are available upon request. Use form C052 to detail non-standard parameters.
Contact your local CTS Representative or CTS Customer Service for assistance.

CTS will change the part number format to include a new designator, after the 407, for identifying Fundamental or Third Overtone mode. In order to accommodate the new designator the Operating Temperature Range and Stability Tolerance will be combined into a one code identifier.

To accommodate a three-digit frequency the format will change from xxMxxxxx to xxxMxxxx.

The new 15-character part number format will be expressed as follows.

ORDERING INFORMATION



Example Part Numbers:
407F35A014M3181 (F_O = 14.31818 MHz)
407T39A050M0000

Custom performance characteristics are available upon request. Use form C052 to detail non-standard parameters.

Contact your local CTS Representative or CTS Customer Service for assistance.

Implementation

This change is effective immediately for the generation of new Model 407 catalog part numbers.

Existing catalog part numbers under the old format will not change and will remain valid. Old format part numbers with frequencies less than or equal to 48.0000 MHz will be considered as Fundamental mode designs. Frequencies above 48.0000 MHz will be Third Overtone mode designs. See list of active Old Format part numbers and their mode designation below.

If a frequency between 30.0010 MHz and 48.0000 MHz, under the old part number format, requires a Third Overtone oscillation mode then a new part number will need to be assigned. Contact your CTS Customer Service or Sales Representative for further assistance.

Model 407

ACTIVE OLD FORMAT PART NUMBERS

Item	Product Number	Mode of Oscillation
1	407C11B12M28800	Fundamental
2	407C11J16M00000	Fundamental
3	407C11J41M25000	Fundamental
4	407C33D16M38400	Fundamental
5	407C35A30M00000	Fundamental
6	407C35B08M00000	Fundamental
7	407C35C16M00000	Fundamental
8	407C35D08M00000	Fundamental
9	407C35D20M00000	Fundamental
10	407C35D24M00000	Fundamental
11	407C35D24M57600	Fundamental
12	407C35D25M00000	Fundamental
13	407C35D28M22400	Fundamental
14	407C35D32M76800	Fundamental
15	407C35D33M33000	Fundamental
16	407C35D50M00000	3RD Overtone
17	407C35E08M00000	Fundamental
18	407C35E09M60000	Fundamental
19	407C35E10M24500	Fundamental
20	407C35E11M05920	Fundamental
21	407C35E12M50000	Fundamental
22	407C35E14M74560	Fundamental
23	407C35E16M38400	Fundamental
24	407C35E16M66667	Fundamental
25	407C35E16M67000	Fundamental
26	407C35E22M11840	Fundamental
27	407C35E29M49120	Fundamental
28	407C35E36M00000	Fundamental
29	407C35E44M73600	Fundamental
30	407C35E50M00000	3RD Overtone
31	407C35E66M66700	3RD Overtone
32	407I12C25M00000	Fundamental
33	407I12D25M00000	Fundamental
34	407I12E25M00000	Fundamental
35	407I13C16M00000	Fundamental
36	407I23E25M00000	Fundamental
37	407I33D12M28800	Fundamental
38	407I33E24M00000	Fundamental
39	407I35A30M00000	Fundamental
40	407I35B18M43200	Fundamental
41	407I35D08M00000	Fundamental
42	407I35D10M00000	Fundamental
43	407I35D14M74560	Fundamental
44	407I35D24M00000	Fundamental
45	407I35D50M00000	3RD Overtone
46	407I35E07M37280	Fundamental
47	407I35E08M00000	Fundamental
48	407I35F08M00000	Fundamental
49	407I35S08M00000	Fundamental

As of 11/7/06