



CS-044 3.2x2.5mm Crystal Resonator

CONNOR WINFIELD



2111 Comprehensive Drive

Aurora, Illinois 60505

Phone: 630-851-4722

Fax: 630-851-5040

www.conwin.com

Description:

The Connor-Winfield model CS-044 is a 54MHz fundamental mode, AT-cut crystal in a 3.2x2.5mm surface mount package. The CS-044 is designed to be used as a reference crystal in synthesizer applications.

Features:

- Frequency: 54.0 MHz
- Frequency Calibration: +/-15 ppm
- Frequency Stability: +/-25 ppm
- Temperature Range: -40 to 85°C
- Surface Mount Package
- Tape and Reel Packaging
- RoHS Compliant / Lead Free ✓RoHS

Electrical Specifications

| Parameter | Minimum | Nominal | Maximum | Units | Notes |
|--|---------|-------------|---------|----------|-----------|
| Output Frequency (Fo) | | 54.0 | | MHz | |
| Frequency Calibration (@25°C) | -15 | | 15 | ppm | |
| Frequency Stability vs. Change in Temperature (Referenced to the frequency measured @25°C) | -25 | | 25 | ppm | |
| Operating Temperature Range: | -40 | | 85 | °C | |
| Operation Mode | | Fundamental | | | |
| Cut | | AT Cut | | | |
| Aging | -1 | | 1 | ppm/Year | |
| Shunt Capacitance: (Co) | | | 2.0 | pF | |
| Load Capacitance: (CL) | | 8 | | pF | |
| Equivalent Series Resistance @ 25 °C | | | 20 | Ohms | |
| Drive Level | | 10 | 200 | uW | |
| Insulation Resistance | | 500 | | Mohm | @ 100 Vdc |
| Storage Temperature: | -40 | | 95 | °C | |

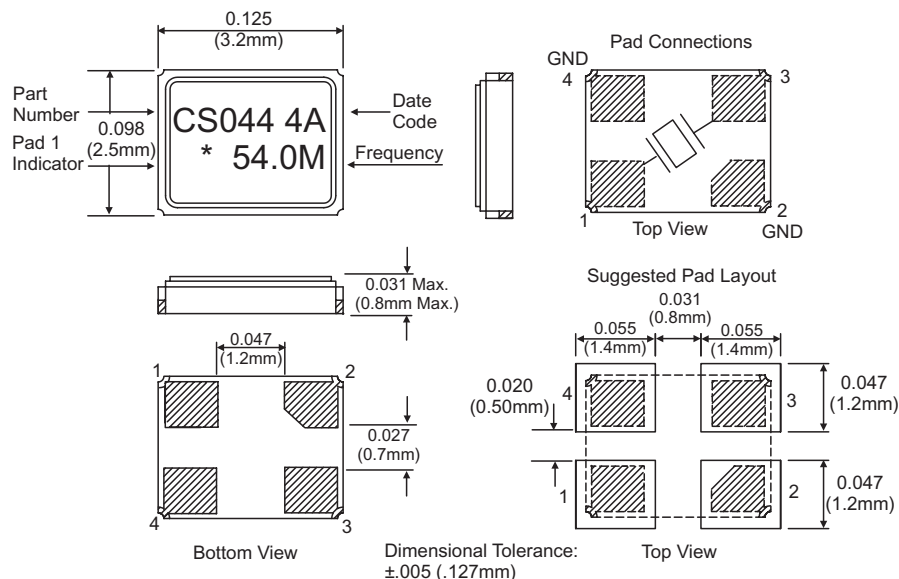
Package Characteristics

| | |
|---------|--|
| Package | Hermetically sealed ceramic 3.2x2.5mm SMD Package. |
| Leakage | 0.01ppm atm, cc/sec. maximum |

Ordering Information

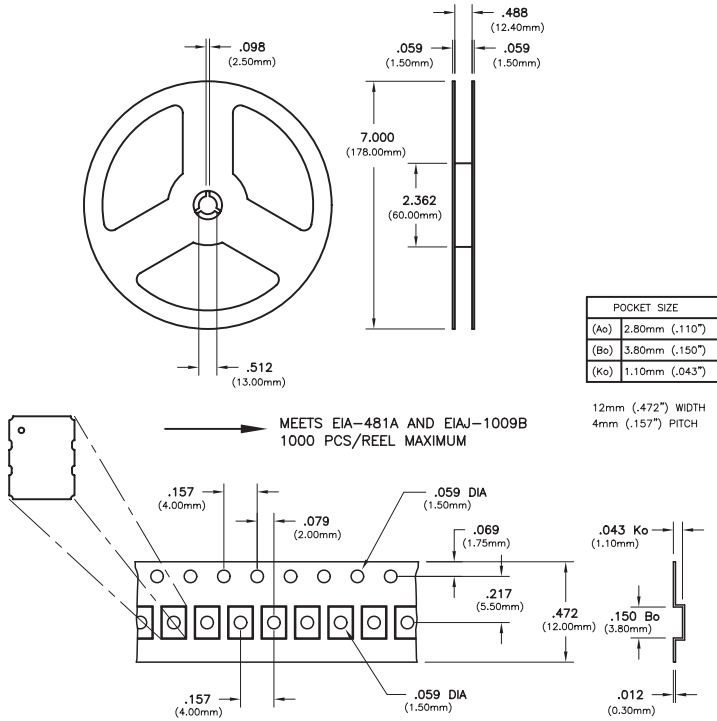
CS-044-054.0M

Package Outline





Tape and Reel Information



Date Code Information

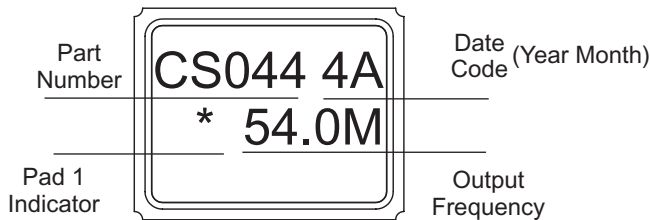
2 Character Date Code

| Year Code | Month Code |
|-----------|---------------|
| 3 = 2013 | A = January |
| 4 = 2014 | B = February |
| 5 = 2015 | C = March |
| 6 = 2016 | D = April |
| 7 = 2017 | E = May |
| 8 = 2018 | F = June |
| 9 = 2019 | G = July |
| 0 = 2020 | H = August |
| 1 = 2021 | J = September |
| 2 = 2022 | K = October |
| | M = November |
| | N = December |

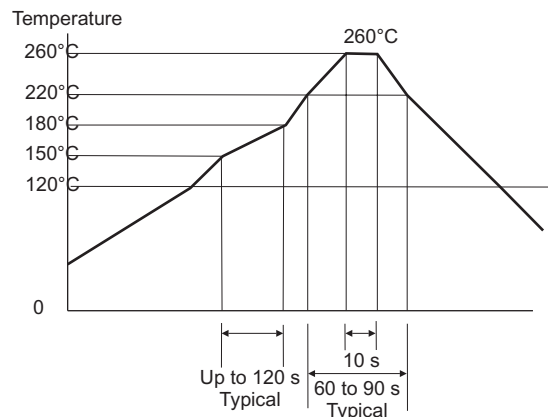
Date Code Example: 9G

9 = 2019, G = July

Marking Information



Solder Profile



Meets IPC/JEDEC J-STD-020C

Revision History

| Revision | Date | Revision. |
|----------|----------|---|
| 00 | 01/14/14 | New Release |
| 01 | 07/08/14 | Update to Electrical Specs |
| 02 | 08/03/15 | Update to Electrical Specs and Digi-Key |
| 03 | 07/23/19 | Updated Tape and Reel dimensions |

| | |
|----------|--------------|
| Bulletin | Xt390 |
| Page | 2 of 2 |
| Revision | 03 |
| Date | 23 July 2019 |