# CS-018 and CS-023 3.2x2.5mm Crystal Resonator



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#### **Description:**

The Connor-Winfield CS-018 and CS-023 are a 3.2x2.5mm surface mount AT-cut 3rd Overtone crystals. They are used as reference crystals in many frequency synthesizer and PLL applications.

#### Features:

- Frequency: 114.285 MHz
- Frequency Calibration: ± 20ppm
- Frequency Stability: CS-018: ±100 ppm CS-023: ±20ppm
- Temperature Range: -40 to 85°C
- Surface Mount Package
- Tape and Reel Packaging
- RoHS Compliant / Lead Free

## **Electrical Specifications**

Parameter	Minimum	Nominal	Maximum	Units	Notes
Output Frequency (Fo)	-	114.285	-	MHz	
Calibration Tolerance @ 25°C					
Model CS-018	-100	-	100	ppm	
Model CS-023	-20	-	20	ppm	
Frequency Stability vs. Change in Temperature					
Model CS-018	-100	-	100	ppm	
Model CS-023	-20	-	20	ppm	
Operating Temperature Range:	-40	-	85	°C	
Operation Mode		3rd Overtone			
_ Cut		AT Cut			
_ Aging	-3	-	3	ppm/Year	
Shunt Capacitance: (Co)	-	-	2.5pF	рF	
Load Capacitance: (CL)	-	18	-	рF	
Equivalent Series Resistance @	25 °C -	-	80	Ohms	
Drive Level	-	100	200	uW	
Insulation Resistance	-	500	-	Mohm	@ 100 Vdc
Storage Temperature:	-55	-	125	°C	

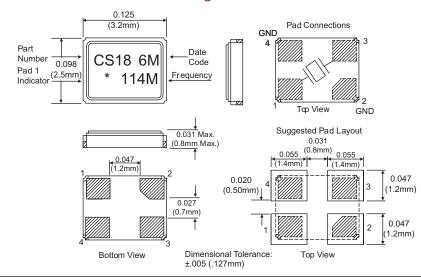
### **Package Characteristics**

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

#### Ordering Information

CS-018-114.285M CS-023-114.285M

### **Package Outline**

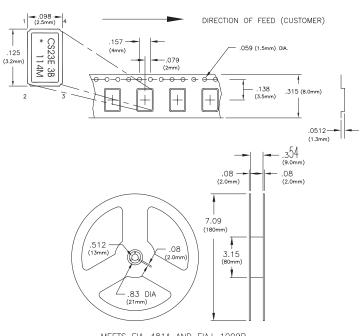




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## **Tape and Reel Information**



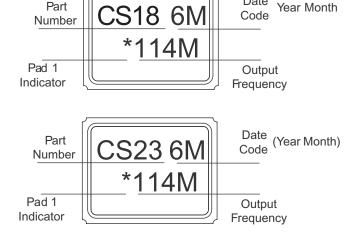
MEETS EIA-481A AND EIAJ-1009B 3000 PCS/REEL MAXIMUM

#### **Date Code Information**

2 Character Date Code Year Code Month Code 3 = 2013 A = January 4 = 2014 B = February 5 = 2015C = March6 = 2016D = April7 = 2017E = May8 = 2018F = June G = JulyH = August J = September K = OctoberM = November N = December

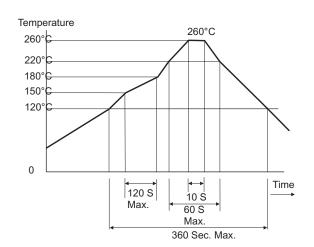
> Date Code Example: ЗJ 3 = 2013, J = September

### **Marking Information**



Date

#### Solder Profile



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