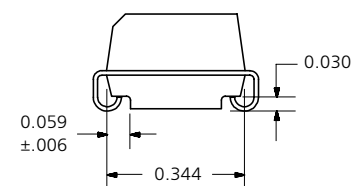
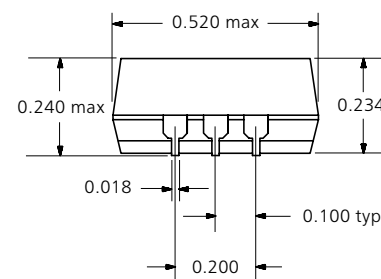
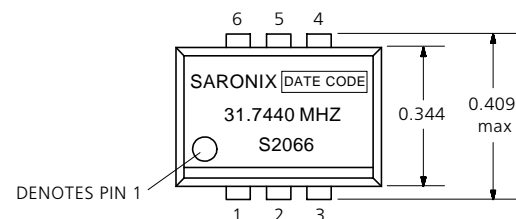


- 1) MODEL IDENTIFICATION NUMBER:** S2066 VCXO
- 2) OPERATING TEMPERATURE RANGE:** 0°C to +70°C
- 3) STORAGE TEMPERATURE RANGE:** -55°C to +125°C
- 4) INPUT (SUPPLY) VOLTAGE:** Rated +5V ±5%
- 5) INPUT (SUPPLY) CURRENT:** 50mA max
- 6) OUTPUT CHARACTERISTICS (ANY COMBINATION OF OPERATING (SUPPLY) VOLTAGE, OPERATING TEMPERATURE RANGE AND LOADING)**
- TTL COMPATIBLE
  - DUTY CYCLE: 45/55% measured at 50% V<sub>DD</sub>, 40/60% measured at 1.4V level
  - LOAD: 5 TTL, 50 pF
  - RISE TIME: 4 nsec max at 20% to 80% V<sub>DD</sub> for CMOS, 1.5 nsec max for TTL
  - FALL TIME: 4 nsec max at 20% to 80% V<sub>DD</sub> for CMOS, 1.5 nsec max for TTL
  - "0" LEVEL: 0.5V maximum
  - "1" LEVEL: 2.5V minimum
  - OUTPUT JITTER: 150 ps peak-to-peak maximum
- 7) ENVIRONMENTAL:**
- THERMAL SHOCK: MIL-STD-883, Method 1011, Condition A
  - MOISTURE RESISTANCE: MIL-STD-883, Method 1004
- 8) MECHANICAL:**
- DIMENSIONS: Per Figure 1
  - SHOCK: MIL-STD-883, Method 2002, Condition B
  - SOLDERABILITY: MIL-STD-883, Method 2003
  - TERMINAL STRENGTH: MIL-STD-883, Method 2004, Test Condition B2
  - VIBRATION: MIL-STD-883, Method 2007, Condition A
  - SOLVENT RESISTANCE: MIL-STD-202, Method 215
  - RESISTANCE TO SOLDERING HEAT: MIL-STD-202, Method 210, Condition B
- 9) OPERATING TEMPERATURE:** 31.7440 MHz
- 10) MODULATION CHARACTERISTICS:**
- RATED CONTROL VOLTAGE RANGE: +0.5V to +4.5 VDC
  - ABSOLUTE CONTROL VOLTAGE RANGE: -1.0V to +6.0 VDC
  - ABSOLUTE PULL RANGE (V<sub>c</sub> = +2.5±2.0): ±50 ppm
  - MONOTONIC LINEARITY: 10% maximum
  - INPUT IMPEDANCE (PIN 1): 50K Ohms minimum
  - MODULATION BANDWIDTH (-3dB): 20 kHz minimum
  - TRANSFER FUNCTION: Frequency increases when Control Voltage increases

STANDARD MARKING FORMAT\*



PIN CONNECTION	
1	CONTROL VOLTAGE
2	TRI-STATE CONTROL
3	GROUND
4	OUTPUT
5	N/C
6	SUPPLY VOLTAGE

FIGURE 1 - PACKAGE DRAWING  
\*Exact location of items may vary

REMOVE ALL BURRS AND SHARP EDGES  
ALL DIAMETERS TO BE CONCENTRIC WITHIN .005 TIR  
TOLERANCES: XXX=±0.005 XX=±0.05, HOLE: ±.003  
DIMENSION IN: mm/inches  
ANGULAR: ±2°

UNLESS OTHERWISE SPECIFIED

REVISIONS				ISSUED		DATE	SaRonix 141 Jefferson Drive, Menlo Park California 94025, U.S.A.		
REV	DESCRIPTION	DATE	APPD	DRN	BOWIE	97/07/25	TITLE ELECTRICAL, ENVIRONMENTAL MECHANICAL SPECIFICATION S2066 VCXO		
IR	INITIAL RELEASE	97/07/31	L L	CHK	C. TAYLOR	97/07/25			
				ENG	E. VAN KEULEN	97/07/25	SIZE	CAGE CODE	DWG. NO.
				MFG	C. TAYLOR	97/07/25	A	61441	S2066
				QA	B. TINTTELNOT	97/07/29	SHEET		1 of 2

**11) FREQUENCY STABILITY** (OVER ALL COMBINATIONS OF OPERATING TEMPERATURE, RATED INPUT (SUPPLY) VOLTAGE CHANGES, LOAD CHANGES, CALIBRATION HELD AT THE NOMINAL VALUE LISTED IN 10c ABOVE): ±50 ppm max

**12) DESIGN/MANUFACTURING DETAILS:**

APPROVED MFGR	CIRCUIT / PART #	CATALOG DATA SHEET
MENLO PARK	CKT - 153	TBD

NOTE:

NO CHANGES SHALL BE MADE THAT AFFECT DESIGN, BILL OF MATERIALS, OR ASSEMBLY PROCESS, WITHOUT PRIOR AUTHORIZATION FROM SARONIX MENLO PARK. ANY REQUEST FOR CHANGE SHALL BE INITIATED BY COMPLETION OF FORM SAR-456 AT LEAST 90 DAYS PRIOR TO PRODUCT SHIPMENT AND MAY BE SUBJECT TO REQUALIFICATION (REFER TO QAP-81).

INTERNAL USE ONLY

**SaRonix** 141 Jefferson Drive, Menlo Park  
California 94025, U.S.A.

SIZE  
**A**

CAGE CODE  
**61441**

DWG. NO.

S2066

REV

IR

DATE

97/07/25

SHEET

2 of 2