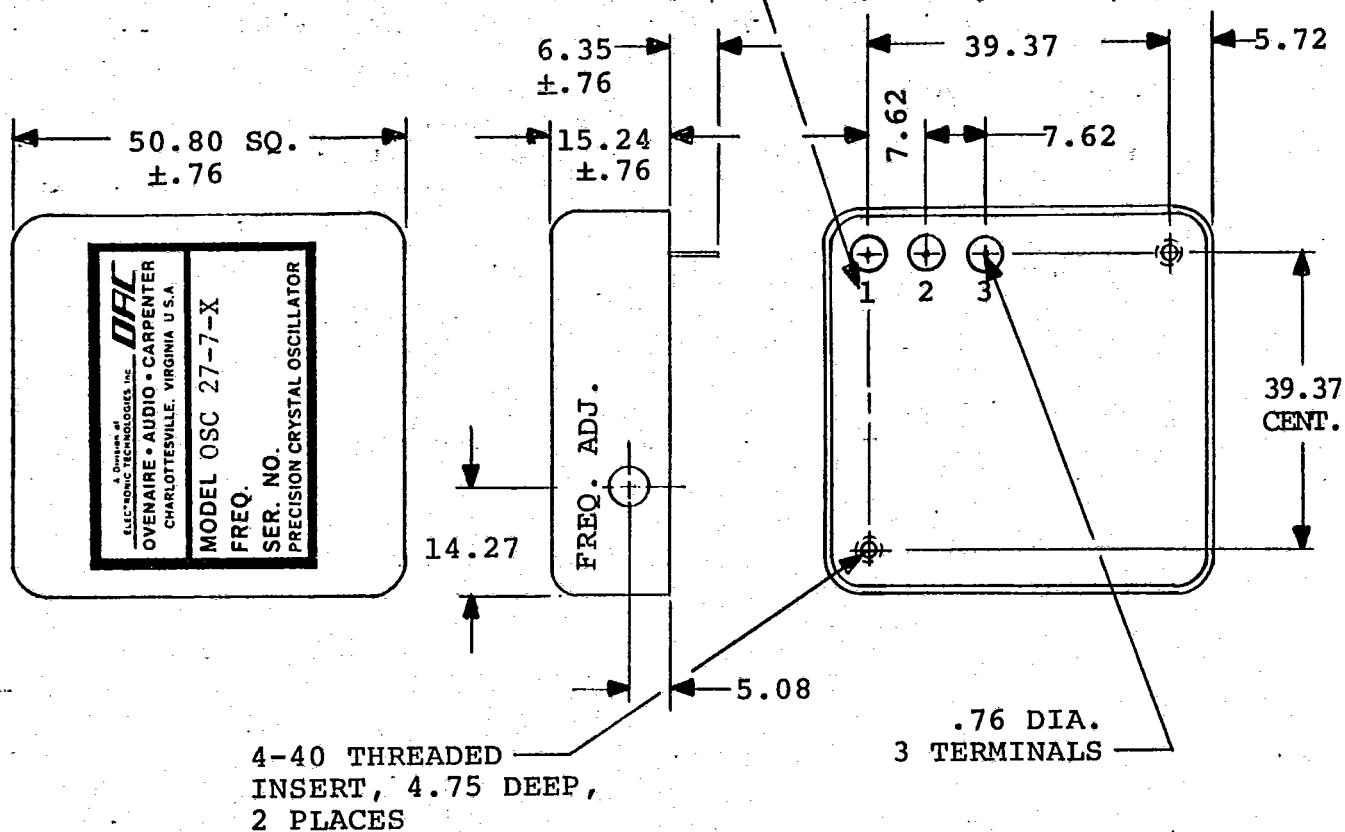


T-50-09

NUMBERS SHOWN FOR REF. ONLY  
(NOT STAMPED ON BASE)

DIMENSIONS IN MILLIMETERS



## PIN CONNECTIONS

1. 0 VDC & CASE GND
2. +12 VDC
3. R.F. OUTPUT

| MM    | INCHES |
|-------|--------|
| .76   | .030   |
| 4.75  | .187   |
| 5.08  | .200   |
| 5.72  | .225   |
| 6.35  | .250   |
| 7.62  | .300   |
| 14.27 | .562   |
| 15.24 | .600   |
| 39.37 | 1.550  |
| 50.80 | 2.000  |

|             |                  |     |        |                                                                              |  |                                       |  |
|-------------|------------------|-----|--------|------------------------------------------------------------------------------|--|---------------------------------------|--|
| SHT. 1 OF 1 | OSC 27-7 SERIES  |     |        | <b>ovenaire</b>                                                              |  | CHARLOTTESVILLE, VIRGINIA             |  |
|             |                  |     |        | NAME                                                                         |  | SHT 1 OF 2                            |  |
|             |                  |     |        | CATALOG TCXO                                                                 |  | OSC 27-7 SERIES                       |  |
|             |                  |     |        | TOLERANCES                                                                   |  | SCALE 1:1                             |  |
|             |                  |     |        | UNLESS OTHERWISE SPECIFIED { MILLIMETERS ± 0.38<br>ANGLES<br>INCH DEC ± .015 |  | DWN M.W. 6/12/79<br>APP'D DAG 6/12/79 |  |
| A           | NEW DECAL ADDED. | DAG | 7-1-85 | MATERIAL: COVER&BASE: BRASS                                                  |  | MARKING: DECAL OR EPOXY INK           |  |
| LET         | REVISION         | BY  | DATE   | FINISH: BRITE NICKEL                                                         |  |                                       |  |

A. GENERAL

This unit is a compact TCXO, less than 2.5 cubic inches, featuring a glass crystal and excellent long term stability with logic output.

B. OUTPUT CHARACTERISTICS

1. Frequency and Part Number: See Table below.
2. Output Level: "0" Level +0.45 VDC maximum at 4.8 mA sink current  
"1" Level +2.4 VDC minimum at 1.2 mA source current
3. Wave Form: Square Wave
4. Load: TTL Compatible (3 Loads)
5. Rise Time: 30 nanoseconds typical
6. Fall Time: 15 nanoseconds typical
7. Duty Cycle: 40/60 to 60/40 at +1.5 VDC Level

C. FREQUENCY STABILITY

|                                 |                               |                          |                           |
|---------------------------------|-------------------------------|--------------------------|---------------------------|
| 1. Part Numbers                 | OSC 27-7-1                    | OSC 27-7-2               | OSC 27-7-3                |
| 2. Frequency Range              | 150 KHz to 2 MHz              |                          |                           |
| 3. Aging after 60 days (Max)    | 1 x 10 <sup>-6</sup> per year |                          | 5 x 10 <sup>-7</sup> /yr. |
| * 4. Ambient Range 0°C to +55°C | ±1 x 10 <sup>-6</sup>         | ±5 x 10 <sup>-7</sup>    | ±3 x 10 <sup>-7</sup>     |
| 5. Short Term (10 Sec.) RMS     | 2 x 10 <sup>-9</sup>          | 2 x 10 <sup>-9</sup>     | 1 x 10 <sup>-9</sup>      |
| 6. Voltage Stability            | 2 x 10 <sup>-7</sup> /2%      | 1 x 10 <sup>-7</sup> /2% | 1 x 10 <sup>-7</sup> /2%  |

\* Referred to frequency at +25°C

D. FREQUENCY ADJUSTMENT

1. Control: Piston type capacitor with screwdriver slot
2. Range: ±3.5 x 10<sup>-6</sup> minimum (sufficient for 5 years)
3. Resolution: ±2.5 x 10<sup>-8</sup> or better

E. POWER INPUT

1. Supply Voltage: +12.0 VDC ±10% with 2% regulation
2. Supply Current: 25 milli-amp typical
3. Alternate Supply Voltages possible on customer request.

F. MECHANICAL CONFIGURATION

1. Standard: See Sht. 1
2. Optional: See Ovenaïre Representative for alternate mechanical packages.

|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|--------------------------------|-----------------|-----|--------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SHT. 2 OF 2<br>OSC 27-7 Series |                 |     |        |         | <b>ovenaire</b><br>CHARLOTTESVILLE, VIRGINIA<br>NAME<br>CATALOG TCXO<br>TOLERANCES<br>UNLESS OTHERWISE SPECIFIED { MILLIMETERS ±<br>ANGLES<br>INCH DEC ±<br>SCALE<br>DWN d.h. 6/12/7<br>APP'D <i>AOB</i> 6/12/79<br>MATERIAL:<br>MARKING: |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
|                                |                 |     |        |         |                                                                                                                                                                                                                                           |
| A                              | REV. TO SHT. 1. | DAG | 7-1-85 |         |                                                                                                                                                                                                                                           |
| LET                            | REVISION        | BY  | DATE   | FINISH: |                                                                                                                                                                                                                                           |