

### FEATURES

- Frequency Range: 1678 - 1680 MHz
- Tuning Voltage: 0-5 Vdc
- SUB-L - Style Package

### APPLICATIONS

- Microwave Relay Links
- Test Equipment
- Satellite Communications / PCS

### PERFORMANCE SPECIFICATIONS

|   | VALUE       | UNITS  |
|---|-------------|--------|
| Oscillation Frequency Range                 | 1678 - 1680 | MHz    |
| Phase Noise @ 10 kHz offset (1 Hz BW, typ.) | -84         | dBc/Hz |
| Harmonic Suppression (2nd, typ.)            | -10         | dBc    |
| Tuning Voltage                              | 0-5         | Vdc    |
| Tuning Sensitivity (avg.)                   | 50          | MHz/V  |
| Power Output                                | -6±3        | dBm    |
| Load Impedance                              | 50          | Ω      |
| Input Capacitance (max.)                    | 50          | pF     |
| Pushing                                     | <10         | MHz/V  |
| Pulling (14 dB Return Loss, Any Phase)      | <20         | MHz    |
| Operating Temperature Range                 | -40 to 85   | °C     |
| Package Style                               | SUB-L       |        |

### POWER SUPPLY REQUIREMENTS

|                            |   |     |
|----------------------------|---|-----|
| Supply Voltage (Vcc, nom.) | 5 | Vdc |
| Supply Current (Icc, typ.) | 6 | mA  |

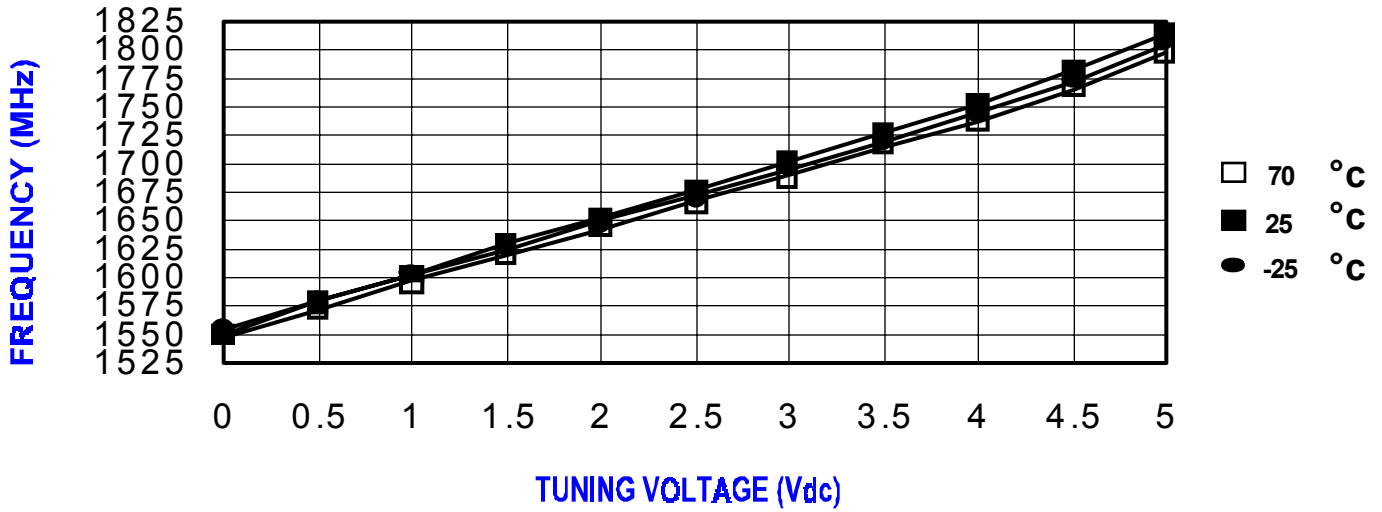
All specifications are typical unless otherwise noted and subject to change without notice.

### APPLICATION NOTES

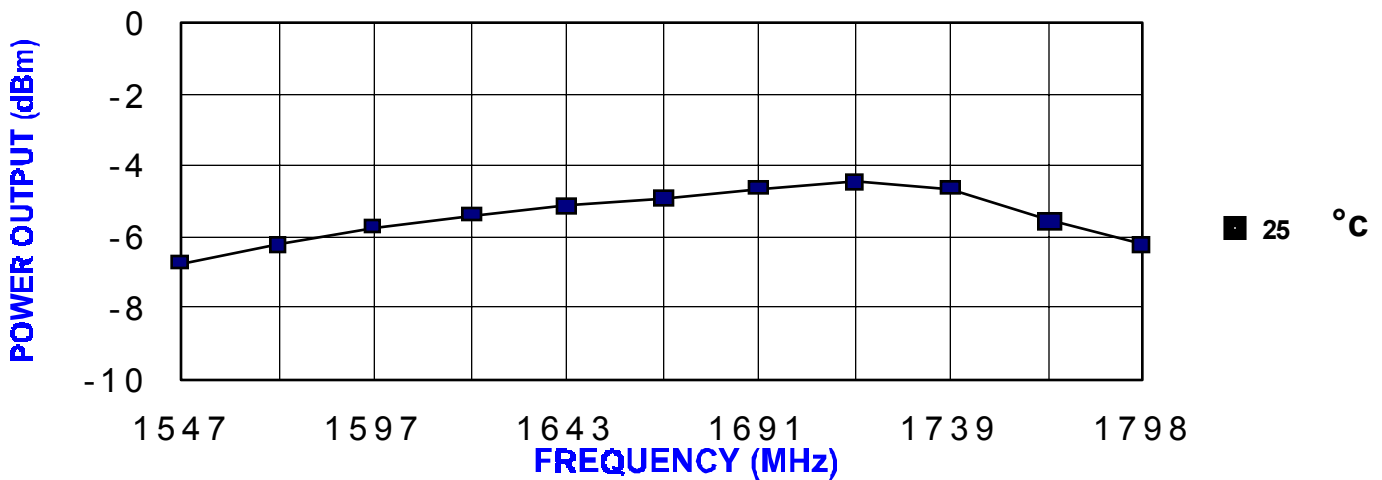
- AN-100/1 : Mounting and Grounding of VCOs
- AN-102 : Proper Output Loading of VCOs
- AN-107 : How to Solder Z-COMM VCOs

### NOTES:

**TUNING CURVE, typ.**

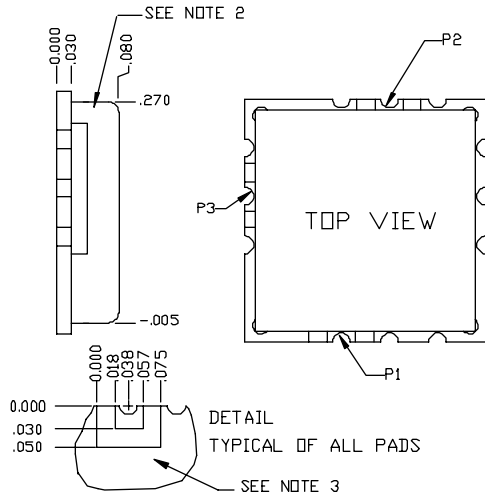
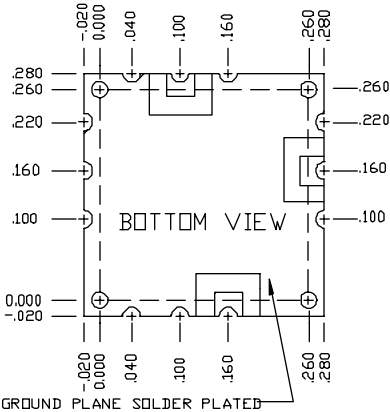


**POWER CURVE, typ.**



**PHYSICAL DIMENSIONS**

SUB-L  
415-0040 REV. D  
(DRAWING NOT TO SCALE)



NOTES:

1. THE INSIDE RADIUS OF ALL 12 HALF HOLES AT THE PERIMETER OF THE BOARD ARE SOLDER PLATED TO PROVIDE A SURFACE FOR THE ATTACHMENT OF THE VCO TO THE MOTHERBOARD.
2. THE SHIELD MATERIAL IS NICKEL SILVER AND MAY BE SOLDERED ALSO.
3. THE GROUND PLANE IS GROUND AND ATTACHES TO THE GROUND TRACK ON THE UPPER SIDE OF THE BOARD AS WELL AS THE SHIELD BY PTH.

TOLERANCES UNLESS OTHERWISE NOTED  
.XXX ± .010

P1= VT  
P2= RF OUT  
P3= Vcc