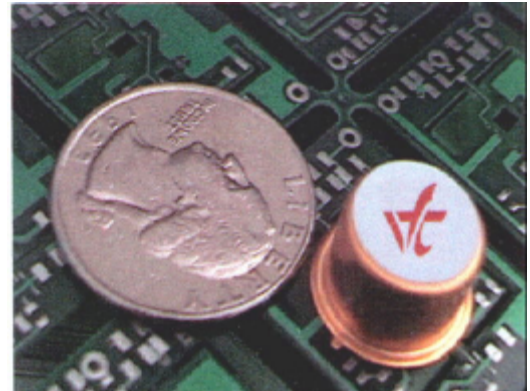
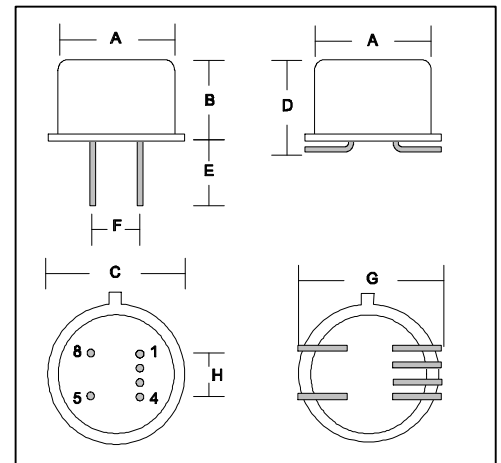


## ECM VFT8 Series

- Smallest OCXO Available
- Extremely Low Power Consumption
- Very Fast Warm-up
- Low Phase Noise
- Low Aging
- Surface Mount Option (VFT8SM)



| Parameter                 | VFT8                       |                      |
|---------------------------|----------------------------|----------------------|
| Frequency Range           | 4.80 to 50.0MHz            |                      |
| Frequency Stability       | +/-100ppb max<br>5ppb max  | vs Temp<br>vs Supply |
| Aging per Day<br>Per Year | 5E-10<br>1E-7              | After 30Days         |
| Allan Variance            | 1E-11                      | 0.1s to 10s          |
| SSB Phase Noise           |                            |                      |
| 10Hz                      | -120dBc/Hz                 |                      |
| 100Hz                     | -145dBc/Hz                 |                      |
| 10kHz                     | -160dBc/Hz                 |                      |
| Retrace                   | +/-20ppb max               | After 30 mins        |
| G-sensitivity             | +/-1ppb/G max              | Worst Direction      |
| Input Voltage             | 5V +/-5%                   | 12V Option           |
| Input Current (Typ)       | Vcc 5V    Vcc12V           | 35 / 20 max          |
| Steady state 25°C         | 25 mA    12 mA             |                      |
| Steady State -30°C        | 70 mA    35 mA             |                      |
| Start up Current          | 100 mA    200 mA           |                      |
| Load                      | 10K ohm //15pF             |                      |
| Warm-up Time              | 35s typ to 0.1ppm          | 20s Vcc 12V          |
| Output Waveform           | 3.3V HCMOS /TTL Compatible |                      |
| Control Voltage           | 0V to 4.1V                 |                      |
| Pulling Range             | +/-0.5ppm to +/-1ppm       | from nominal         |
| Deviation Slope           | 0.4ppm/V                   | monotonic positive   |
| Setability                | 1.0V min 3.0V max          | @ 25°C Fnom          |



| A    | B    | C    | D    | E    | F    | G    | H    |
|------|------|------|------|------|------|------|------|
| 12.7 | 9.27 | 14.3 | 10.9 | 6.35 | 7.62 | 15.2 | 7.62 |

Dimensions in mm

| Pin | 1  | 2    | 3        | 4        | 5   | 6/7 | 8   |
|-----|----|------|----------|----------|-----|-----|-----|
|     | Vc | Vref | Tristate | Case Gnd | O/P | N/C | Vcc |

VFT8H A 17 L 2 10.0M

|                                                                                                                                        |  |                                                                                                                                                                             |  |                                                                                                          |  |                                  |  |                  |
|----------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--|----------------------------------|--|------------------|
| <b>Temperature</b><br>A= 0°C to 50°C<br>B= -10°C to 60°C<br>C= 0°C to 70°C<br>D= -20°C to 70°C<br>E= -30°C to 70°C<br>F= -45°C to 85°C |  | <b>Stability</b><br>17= 1x10 <sup>-7</sup><br>58= 5x10 <sup>-8</sup><br>28= 2x10 <sup>-8</sup><br>18= 1x10 <sup>-8</sup><br>59= 5x10 <sup>-9</sup><br>YZ Yx10 <sup>-2</sup> |  | <b>Aging</b><br>L= 1x10 <sup>-9</sup> /Day<br>S= 5x10 <sup>-10</sup> /Day<br>P= 2x10 <sup>-10</sup> /Day |  | <b>Supply</b><br>5= 5V<br>2= 12V |  | <b>Frequency</b> |
|----------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--|----------------------------------|--|------------------|