

# Surface Mount Oscillator

## ECM VFAC3 Series

- Designed For Gigabit Ethernet Applications
- Very Low Phase Jitter
- Miniature Ceramic Package
- SMD Tri-state Oscillator
- Industrial Temperature Range Available
- EMI Shielded



| Parameter           | VFAC3                                                         |                    |
|---------------------|---------------------------------------------------------------|--------------------|
| Frequency Range     | 80.0MHz to 160.0MHz                                           |                    |
| Frequency Stability | +/-100ppm                                                     |                    |
| Supply Voltage      | 5V +/-5%<br>3.3V +/-5%                                        | Standard<br>Option |
| Supply Current      | 60mA max<br>Frequency and load dependant                      | 15pf Load          |
| Load                | 10TTL gates or 50pF AC Coupled<br>50R Termination recommended |                    |
| Duty Cycle          | 40 / 60 or 45/55                                              | Specify            |
| Rise & Fall Times   | 1.5nS max                                                     |                    |
| Logic "1" Level     | 0.9Vcc min                                                    |                    |
| Logic "0" Level     | 0.1Vcc max                                                    |                    |
| Enable Input        | Input HIGH (>2.5V) or floating ACTIVE                         |                    |
| Disable Input       | Input LOW (<0.5V) INFINITE IMPEDANCE                          |                    |
| Start-up Time       | 10mS max                                                      | 2mS Typ            |
| Phase Jitter        | 1pS max                                                       |                    |
| Enable Disable Time | 100nS<br>10nS available                                       | Specify            |
| Operating Temp      | 0°C to +70°C (-45° to +85°C) Available                        |                    |

| Environmental & Mechanical |                                                              |
|----------------------------|--------------------------------------------------------------|
| <b>Mechanical Shock</b>    | Mil STD 202 Method 213<br>Cond E                             |
| <b>Thermal Shock</b>       | Mil STD 883 Method 1011<br>Cond A                            |
| <b>Vibration</b>           | MIL-STD-883 Method 2007<br>Cond A                            |
| <b>Soldering Condition</b> | 260°C for 10s max:<br>230°C for 90s max                      |
| <b>Hermetic Seal</b>       | Leak rate less than 5x10 <sup>-8</sup><br>Atm.cc/s of helium |

Part Numbering: VFAC3 B H L 1 125.0M

Series

Stability

S= 20ppm A= 25ppm

B= 50ppm Blank = 100ppm

Symmetry

HH=52.5/37.5 H= 45/55

Blank= 40/60

Supply Voltage L=3.3 Blank = 5V

Temperature Range

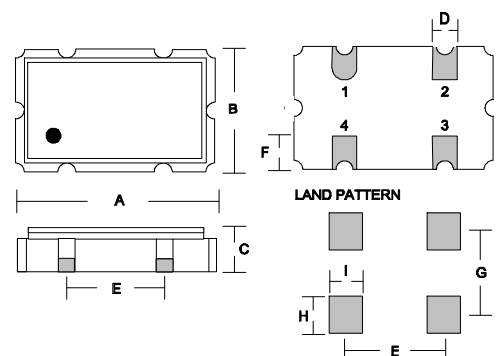
Blank= 0°C to +70°C

1= -40°C to +85°C

Frequency

| Pin      | 1        | 2         | 3   | 4   |
|----------|----------|-----------|-----|-----|
| Function | Tristate | GND/ Case | O/P | Vcc |

| A    | B    | C    | D    | E    | F    | G    | H    |
|------|------|------|------|------|------|------|------|
| 7.70 | 5.20 | 2.29 | 1.14 | 5.08 | 1.27 | 3.98 | 1.39 |



Dimensions in mm

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