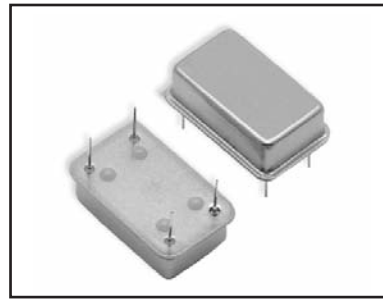


FMVC47 SERIES

5.0 Vdc VCXO

14 PIN DIP



- High Frequency via Multiplier
- 5.0 Vdc Supply Voltage
- HCMOS/TTL Compatible
- Lower Cost

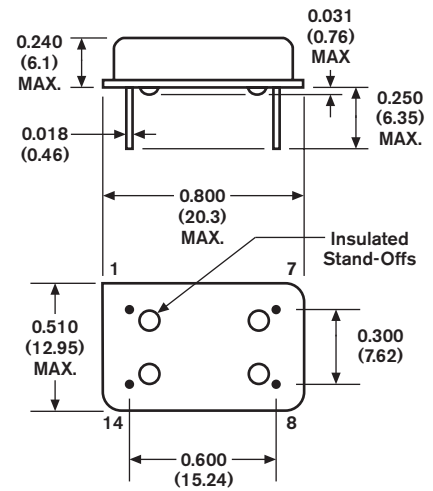


SPECIFICATIONS

09 - Issue 2 - 021209

| Parameter | Specification | | | | | | | | | | | | |
|-----------------------------|--|-------|-----------|--------|------------|------|------------|-------|-----------|--------|-----------|------|------------|
| Frequency Range | 40.0 to 160.0 MHz | | | | | | | | | | | | |
| Overall Frequency Tolerance | ±20 ppm to ±100 ppm (Inclusive of Operating Temp., Supply Voltage, & Load.) | | | | | | | | | | | | |
| Operating Temperature Range | 0 to +70°C Std. | | | | | | | | | | | | |
| Storage Temperature | -55 to +125°C | | | | | | | | | | | | |
| Supply Voltage (Vdd) | +5.0 Vdc (±0.5 Vdc) | | | | | | | | | | | | |
| Supply Current (Icc) | 30 mA max. @ 60.0 to 99.9 MHz 50 mA max. @ 100.0 to 160.0 MHz | | | | | | | | | | | | |
| Symmetry (Duty Cycle) | 40/60% Std., 45/55% Available. (See Spec. Option S) | | | | | | | | | | | | |
| Output "0" Level (VOL) | 0.4 Vdc max. (TTL) 0.5 Vdc max. (HCMOS) | | | | | | | | | | | | |
| Output "1" Level (VOH) | 2.4 Vdc min. (TTL) 4.5 Vdc min. (HCMOS) | | | | | | | | | | | | |
| Rise and Fall Time | 10 ns max. < 5 ns typical | | | | | | | | | | | | |
| Linearity | ±20% max. Std., ±10% Available (See Spec. Option L) | | | | | | | | | | | | |
| Output Load | 10 TTL / 15 pF HCMOS | | | | | | | | | | | | |
| Pullability | ±100 to ±150 ppm typical, ±75 to ±300 ppm Available. (Select a min. and max. pullability from part number.) Voltage Control Pin 1 Nom. 2.5 Vdc, Range 0.5 to 4.5 Vdc | | | | | | | | | | | | |
| Jitter (typical) | < 25 pico seconds, one sigma | | | | | | | | | | | | |
| Phase Noise (typical) | <table border="1"> <tr><td>10 Hz</td><td>-75dBc/Hz</td></tr> <tr><td>100 Hz</td><td>-105dBc/Hz</td></tr> <tr><td>1kHz</td><td>-100dBc/Hz</td></tr> <tr><td>10kHz</td><td>-90dBc/Hz</td></tr> <tr><td>100kHz</td><td>-95dBc/Hz</td></tr> <tr><td>1MHz</td><td>-120dBc/Hz</td></tr> </table> | 10 Hz | -75dBc/Hz | 100 Hz | -105dBc/Hz | 1kHz | -100dBc/Hz | 10kHz | -90dBc/Hz | 100kHz | -95dBc/Hz | 1MHz | -120dBc/Hz |
| 10 Hz | -75dBc/Hz | | | | | | | | | | | | |
| 100 Hz | -105dBc/Hz | | | | | | | | | | | | |
| 1kHz | -100dBc/Hz | | | | | | | | | | | | |
| 10kHz | -90dBc/Hz | | | | | | | | | | | | |
| 100kHz | -95dBc/Hz | | | | | | | | | | | | |
| 1MHz | -120dBc/Hz | | | | | | | | | | | | |
| Control Voltage (Vc) | Nominal 2.5 Vdc, Range 0.5-4.5 Vdc, Positive Transfer | | | | | | | | | | | | |
| Aging @ 25°C | ±3 ppm max first year | | | | | | | | | | | | |

FULL SIZE 14 PIN DIP



PIN FUNCTION TABLE

| Pin | Function |
|-----|----------------------|
| 1 | Control Voltage (Vc) |
| 7 | Case Ground |
| 8 | Output |
| 14 | Supply Voltage (Vdd) |

All specifications subject to change without notice.

STANDARD MARKING

XX.XXM
XXXXXXX
• FMI YYWW

XX.XXM FREQUENCY in MHz
XXXXXXX Part Number
ESD/Pin 1 Symbol, FMI, Date Code

Dimensions: $\frac{\text{Inches}}{\text{(mm)}}$

Standard Specifications for product indicated in color

PART DESCRIPTION SYSTEM

