

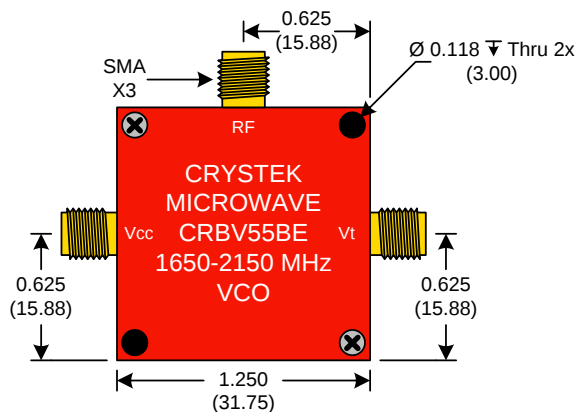
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**MICROWAVE**  
A DIVISION OF CRYSTEK CORPORATION

**RedBox VCO**  
**CRBV55BE-1650-2150**

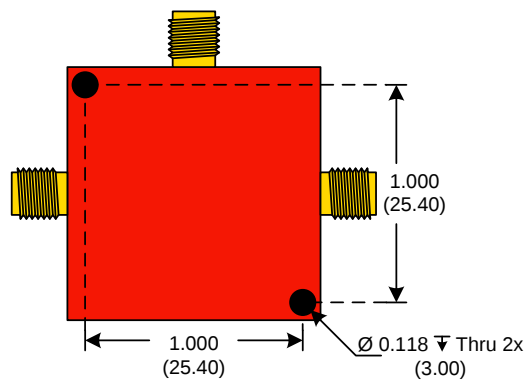


| PERFORMANCE SPECIFICATION                       | MIN  | TYP  | MAX  | UNITS              |
|-------------------------------------------------|------|------|------|--------------------|
| Lower Frequency:                                |      |      | 1650 | MHz                |
| Upper Frequency:                                | 2150 |      |      | MHz                |
| Tuning Voltage:                                 | 0.5  |      | 4.5  | VDC                |
| Supply Voltage:                                 | 4.75 | 5.0  | 5.25 | VDC                |
| Output Power:                                   | +2.0 | +5.0 | +8.0 | dBm                |
| Supply Current:                                 |      | 15   | 22   | mA                 |
| Harmonic Suppression (2 <sup>nd</sup> Harmonic) |      | -15  | -10  | dBc                |
| Pushing:                                        |      | 1.5  | 3.5  | MHz/V              |
| Pulling, all Phases:                            |      | 10   | 20   | MHz pk-pk          |
| Tuning Sensitivity:                             |      | 160  |      | MHz/V              |
| Phase Noise @ 10kHz offset:                     |      | -96  | -91  | dBc/Hz             |
| Phase Noise @ 100kHz offset:                    |      | -118 | -113 | dBc/Hz             |
| Load Impedance:                                 |      | 50   |      | $\Omega$           |
| Input Capacitance:                              |      |      | 27   | pF                 |
| Operating Temperature Range:                    | -40  |      | +85  | $^{\circ}\text{C}$ |
| Storage Temperature Range:                      | -45  |      | +90  | $^{\circ}\text{C}$ |

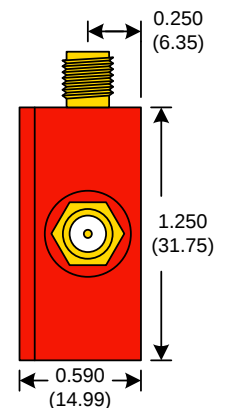
FRONT



BACK



SIDE



● Unless otherwise specified, Dimensions are in:  $\frac{\text{IN}}{(\text{mm})}$

**Product Control:**

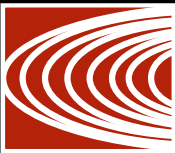
|                      |                    |               |             |
|----------------------|--------------------|---------------|-------------|
| Crystek Part Number: | CRBV55BE-1650-2150 | Release Date: | 30-Jan-2014 |
| Revision Level:      | E                  | Responsible:  | C. Vales    |

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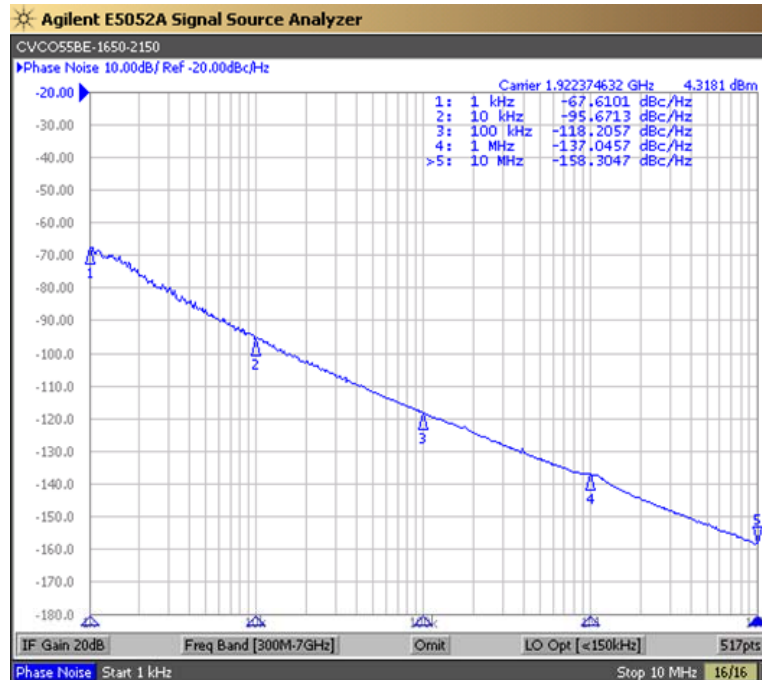
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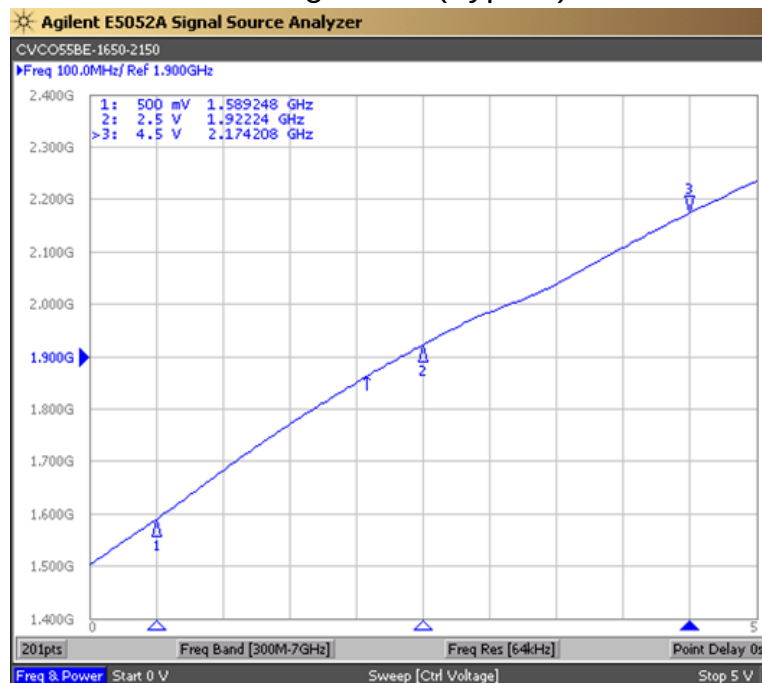
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**RedBox** VCO  
CRBV55BE-1650-2150

Phase Noise (1 Hz BW, Typical)



Tuning Curve (Typical)



**Product Control:**

|                      |                    |               |             |
|----------------------|--------------------|---------------|-------------|
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Specification is subject to change without notice

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