



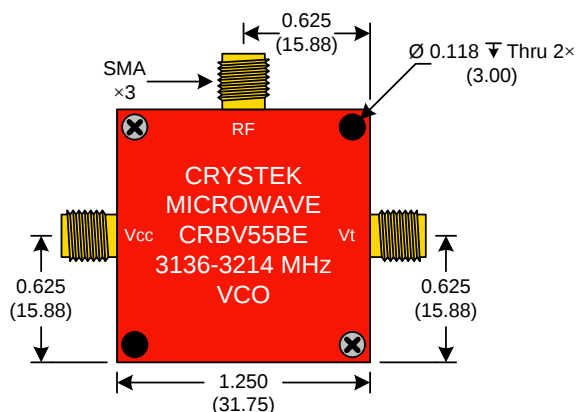
**CRYSTEK**  
**MICROWAVE**  
A DIVISION OF CRYSTEK CORPORATION

**RedBox VCO**  
**CRBV55BE-3136-3214**

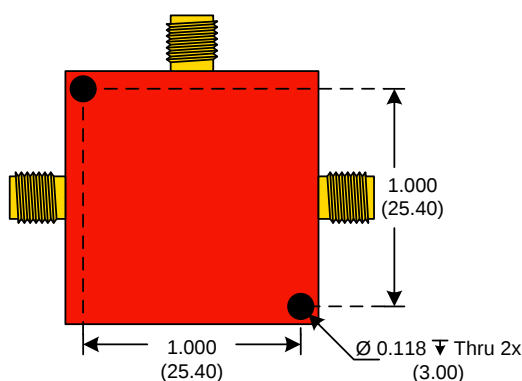


| PERFORMANCE SPECIFICATION                       | MIN  | TYP  | MAX   | UNITS              |
|-------------------------------------------------|------|------|-------|--------------------|
| Lower Frequency:                                |      |      | 3136  | MHz                |
| Upper Frequency:                                | 3214 |      |       | MHz                |
| Tuning Voltage:                                 | 0.5  |      | 4.5   | VDC                |
| Supply Voltage:                                 | 4.75 | 5.0  | 5.25  | VDC                |
| Output Power:                                   | +6.0 | +9.0 | +12.0 | dBm                |
| Supply Current:                                 |      | 25   |       | mA                 |
| Harmonic Suppression (2 <sup>nd</sup> Harmonic) |      | -10  |       | dBc                |
| Pushing:                                        |      | 5.0  |       | MHz/V              |
| Pulling, all Phases:                            |      | 10.0 |       | MHz pk-pk          |
| Tuning Sensitivity:                             |      | 70   |       | MHz/V              |
| Phase Noise @ 10kHz offset:                     |      | -96  |       | dBc/Hz             |
| Phase Noise @ 100kHz offset:                    |      | -116 |       | dBc/Hz             |
| Load Impedance:                                 |      | 50   |       | $\Omega$           |
| Input Capacitance:                              |      |      | 33    | 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-3136-3214 | Release Date: | 01-Sep-10 |
| Revision Level:      | A                  | Responsible:  | C. Vales  |

Page 1 of 2



**CRYSTEK**  
**CORPORATION**

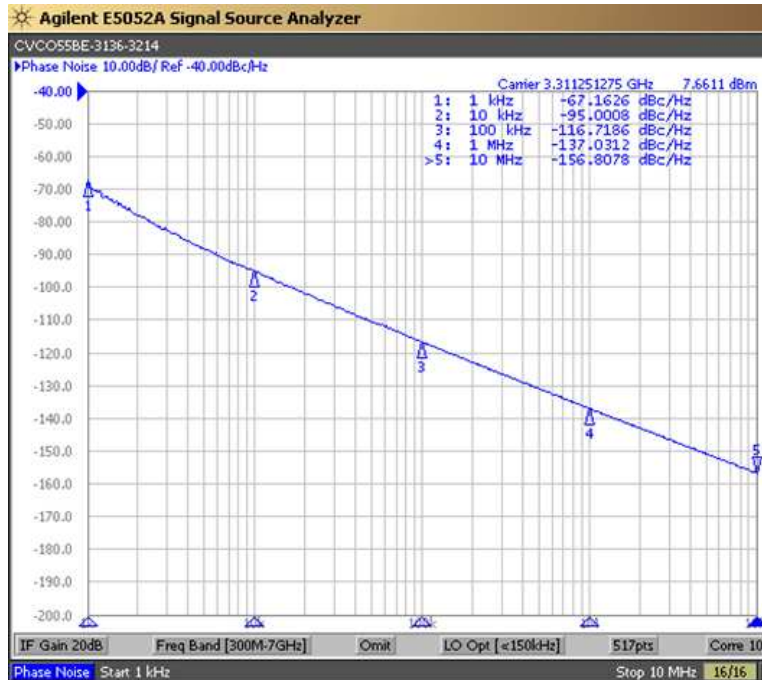
12730 COMMONWEALTH DRIVE • FORT MYERS, FLORIDA 33913  
PHONE: 239-561-3311 • 800-237-3061  
FAX: 239-561-1025 • WWW.CRYSTEK.COM



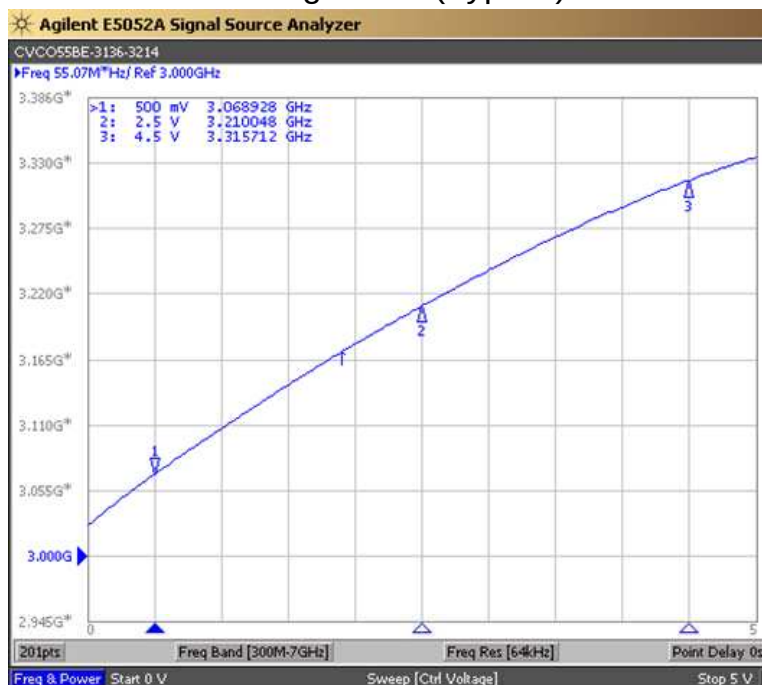
**CRYSTEK**  
MICROWAVE  
A DIVISION OF CRYSTEK CORPORATION

**RedBox** VCO  
CRBV55BE-3136-3214

### Phase Noise (1 Hz BW, Typical)



### Tuning Curve (Typical)



#### Product Control:

|                      |                    |               |           |
|----------------------|--------------------|---------------|-----------|
| Crystek Part Number: | CRBV55BE-3136-3214 | Release Date: | 01-Sep-10 |
| Revision Level:      | A                  | Responsible:  | C. Vales  |

Specification is subject to change without notice

Page 2 of 2



**CRYSTEK**  
CORPORATION

12730 COMMONWEALTH DRIVE • FORT MYERS, FLORIDA 33913  
PHONE: 239-561-3311 • 800-237-3061  
FAX: 239-561-1025 • WWW.CRYSTEK.COM