



**VECTRON**  
INTERNATIONAL  
A  DOVER COMPANY

## VVA1, VVA2, VVA3 Full Size VCXO

<b>Package Option</b>	A1 = 0.8" x 0.5" x 0.2" 14 pin DIP A2 = 0.8" x 0.5" x 0.2" 14 pin Gull Leaded Surface Mount A3 = 0.8" x 0.5" x 0.4" 14 pin DIP
<b>Frequency Range</b>	1.0 to 40 MHz (Fundamental <80ps/pk-pk Jitter) 40 to 160 MHz uses a low jitter internal multiplier IC (<150ps/pk-pk Jitter) which improves aging and pullability but will also increase phase noise
<b>Electrical Options</b>	A = +5.0 Vdc ± 20% Linearity B = +3.3 Vdc ± 20% Linearity E = +5.0 Vdc ± 10% Linearity F = +3.3 Vdc ± 10% Linearity
<b>Voltage Control Range</b>	1 = ±50 PPM Minimum
<b>Slope Positive</b>	2 = ±100 PPM Minimum 3 = ±150 PPM Minimum 4 = ±200 PPM Minimum
<b>Stability Options</b> (Inclusive of Operating Temperature, Supply Voltage and Load)	A = ±100 PPM 0C to +70C B = ±50 PPM 0C to +70C C = ±100 PPM -40C to +85C D = ±50 PPM -40C to +85C E = ±25 PPM 0C to +70C
<b>Tight Stability Options</b>	G = ±20 PPM 0C to +70C A3 Package H = ±10 PPM 0C to +70C A3 Package I = ±20 PPM -40C to +85C A3 Package
<b>Calibration Tolerance</b>	±25 PPM at +25 ±2C at Center Voltage
<b>Duty Cycle</b>	40/60
<b>Start-Up</b>	10 ms Maximum
<b>Aging</b>	<5.0 PPM/First year at +40C dynamic A1 and A2 Package <2.0 PPM/First year at +40C dynamic A3 Package
<b>Load</b>	15 pF HCMOS or 5 TTL Maximum
<b>Current</b>	20 mA Maximum ≤20 MHz 40 mA Maximum ≤30MHz 50 mA Maximum >30MHz

**STD Package**

A1, A3 Anti Static Tubes  
A2 Tape & Reel 250 pcs/reel

## Environmental and Mechanical Compliance

Parameter	Conditions
Mechanical Shock	MIL-STD-883, 2002.3 B
Mechanical Vibration	MIL-STD-883, 2007.1 B
Lead Solderability	MIL-STD-883, 2003.5
Gross Leak	MIL-STD-883, 1014.7
Fine Leak	MIL-STD-883, 1014.7
Storage Temperature	-55C to 125C

