

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

VAC 100 A 48 F T - 155.520MHz	
Package VAC = 14 Pin Dip / HCMOS-TTL / VCXO VBC = 8 Pin Dip / HCMOS-TTL / VCXO	Duty Cycle Blank=40-60% / T=45-55%
Inclusive Tolerance/Stability 100= +/-100ppm, 50= +/-50ppm, 25= +/-25ppm, 20= +/-20ppm, 15=±15ppm	Frequency Deviation (Over Control Voltage) A=±50ppm / B=±100ppm / C=±150ppm / D=±200ppm / E=±300ppm / F=±500ppm
Supply Voltage Blank=5.0Vdc ±5% / A=3.3Vdc ±5%	Operating Temperature Range Blank = 0°C to 70°C, 27 = -20°C to 70°C, 48 = -40°C to 85°C

ELECTRICAL SPECIFICATIONS

Revision: 1997-C

Frequency Range (Full Size / 14 Pin Dip)	1.500MHz to 200.000MHz
Frequency Range (Half Size / 8 Pin Dip)	1.000MHz to 40.000MHz
Operating Temperature Range	0°C to 70°C / -20°C to 70°C / -40°C to 85°C
Storage Temperature Range	-55°C to 125°C
Supply Voltage	5.0Vdc ±5%, 3.3Vdc ±5%
Aging (at 25°C)	±5ppm / year Maximum
Load Drive Capability	10TTL Load or 15pF HCMOS Load Maximum
Start Up Time	10mSeconds Maximum
Pin 1 Control Voltage (Positive Transfer Characteristic)	2.5Vdc ±2.0Vdc
Linearity	±20%
Input Current	1.000MHz to 20.000MHz 20.001MHz to 30.000MHz 30.001MHz to 200.000MHz 20mA Maximum 40mA Maximum 60mA Maximum
One Sigma Clock Jitter	<40.000MHz / ±25pSeconds Maximum >40.000MHz / ±50pSeconds Maximum
Absolute Clock Jitter	< 40.000MHz / ±100pSeconds Maximum >40.000MHz / ±200pSeconds Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load ±100ppm, ±50ppm, ±25ppm, ±20ppm, ±15ppm (20ppm and 15ppm= 0°C to 70°C Only)
Output Voltage Logic High (Voh)	w/TTL Load w/HCMOS Load 2.4Vdc Minimum Vdd -0.5Vdc Minimum
Output Voltage Logic Low (Vol)	w/TTL Load w/HCMOS Load 0.4Vdc Maximum 0.5Vdc Maximum
Rise Time / Fall Time	0.4Vdc to 2.4Vdc w/TTL Load; 20% to 80% of Waveform w/HCMOS Load 5nSeconds Maximum
Duty Cycle	@1.4Vdc w/TTL Load; @50% w/HCMOS Load @1.4Vdc w/TTL Load or w/HCMOS Load 50 ±10% (Standard) 50±5% (Optional)
Frequency Deviation Over Control Voltage	A=±50ppm Min. / B=±100ppm Min. / C=±150ppm Min. / D=±200ppm Min. / E=±300ppm Min. / F=±500ppm Min.

MECHANICAL DIMENSIONS

Marking Guide on page F3-F4

14 Pin Full Size All Dimensions in mm.		8 Pin Half Size All Dimensions in mm.	
Pin 1: Control Voltage (Vc) Pin 7: Case Ground	Pin 8: Output Pin 14: Supply Voltage	Pin 1: Control Voltage (Vc) Pin 4: Case Ground	Pin 5: Output Pin 8: Supply Voltage
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