

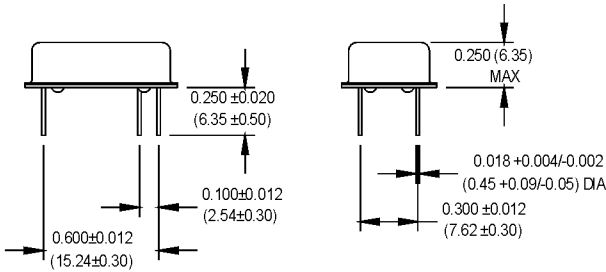
MVP Series

14 pin DIP, 5.0 Volt, PECL, VCXO

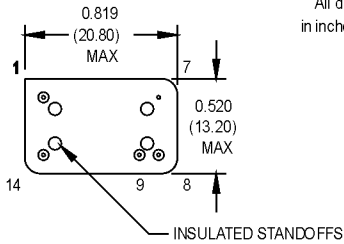


Ordering Information

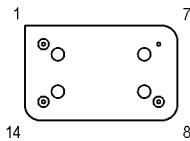
	MVP	1	8	Z	2	B	D	-R	00.0000	MHz
Product Series										
Temperature Range	1: 0°C to +70°C 2: -40°C to +85°C									
Stability	3: ±100 ppm 4: ±50 ppm 6: ±25 ppm 8: ±20 ppm									
Output Type	V: Single Output Z: Dual Complementary Output									
Pull Range (Vc = .5 to 4.5 V)	2: ±100 ppm min.									
Symmetry/Logic Compatibility	A: 40/60 B: 45/55									
Package/Lead Configurations	D: DIP; Nickel Header									
RoHS Compliance	Blank: non-RoHS compliant part -R: RoHS compliant part									
Frequency (customer specified)										



All dimensions in inches (mm).



OPTIONAL 4-PIN PACKAGE



APR Equivalents

APR	Pull Range	Stability
±50 ppm	±100 ppm	±50 ppm
±75 ppm	±100 ppm	±25 ppm

Pin Connections

FUNCTION	4 Pin	5 Pin
Control Voltage	1	1
Circuit/Case Ground	7	7
Output (Q)	8	8
Output (Q̄)		9
+Vcc	14	14

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition	
Electrical Specifications	Frequency Range	F	19.44		160	MHz	See Note 1	
	Frequency Stability	ΔF/F	(See Ordering Information)					
	Operating Temperature	Ta	(See Ordering Information)					
	Storage Temperature	Ts	-55		+125	°C		
	Input Voltage	Vcc	4.75	5.0	5.25	V		
	Input Current	Iee/Icc		40	60	nA		
	Symmetry (Duty Cycle)		(See Ordering Information)					
	Load				50	Ω	See Note 2	
	Rise/Fall Time	Tr/Tf		1.5	2	ns	See Note 3	
	Logic "1" Level	Voh	Vcc - 0.98			V		
	Logic "0" Level	Vol			Vcc - 1.63	V		
	Cycle to Cycle Jitter @ 155.52 MHz			9.5	15	ps RMS	1 Sigma	
	Phase Jitter @ 155.52 MHz	φJ		12	15	ps RMS	Integrated 12 kHz - 20 MHz	
	Peak to Peak Jitter (+/-) @ 155.52 MHz	TJ			84	105	ps	@ BER 1E-12
	Phase Noise (Typical) @ 155.52 MHz	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	dBc/Hz	Offset from carrier
	Modulation Bandwidth	fm			10	kHz		
	Input Impedance (Pin 1)	Zin	50			KΩ		
	Control Voltage	Vc	0.5		4.5	V		
	Center Frequency	Vc0		2.5		V		
	Pullability		(See Ordering Information)					Over control voltage
Linearity				10	%			
Tri-State Function		Input Logic "1" or floating; output active Input Logic "0"; output to High-Z						
Environmental	Mechanical Shock	Per MIL-STD-202, Method 213, Condition C						
	Vibration	Per MIL-STD-202, Method 201 & 204						
	Wave Solder Conditions	260°C for 10 s max.						
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm.cc/s of helium)						
	Solderability	Per EIAJ-STD-002						

- Higher frequencies available. Consult factory.
- See load circuit diagram #3.
- Rise/Fall times are measured between Vcc -0.98 and Vcc -1.63 V.

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