

Features and Benefits

Wide Pulling Range (+/- 27 ppm)
 5V supply ; 20 mA current drain
 30 MHz operating frequency

Typical Applications:

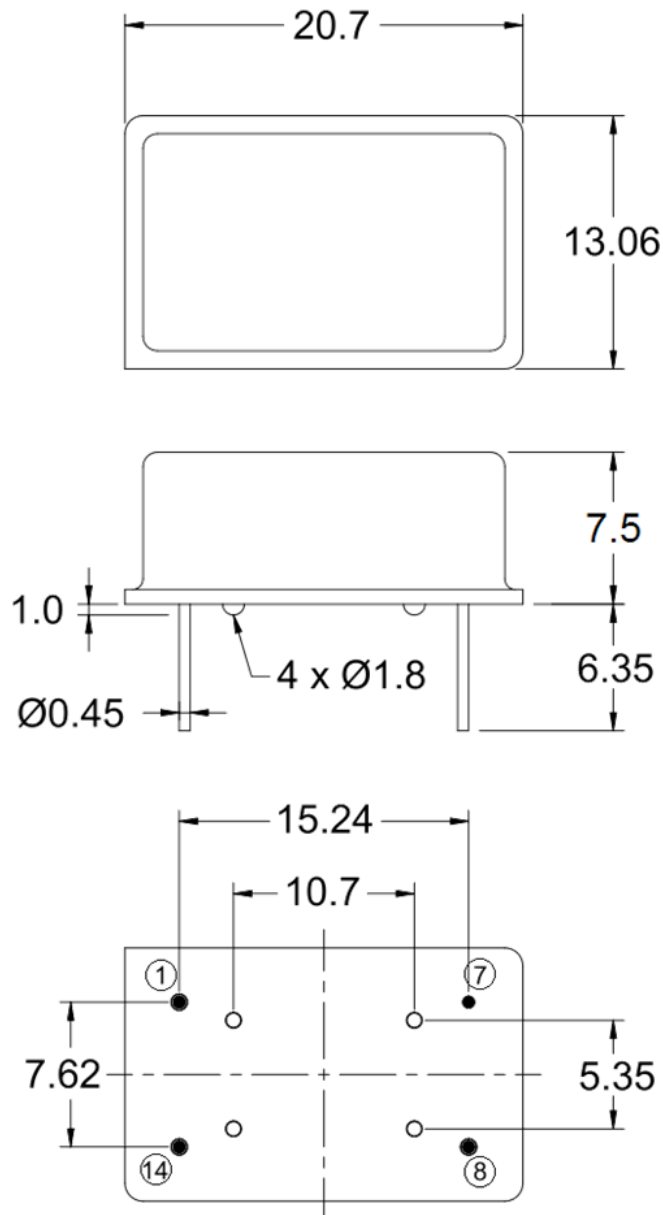
Mobile Radio; Wireless Data
 Microwave Communications

Description

Discrete temperature compensated VCTCXO packaged in a rugged DIP package industry standard.

Mechanical Drawing & Pin Connections

Drawing No: MD140028-1



Pin	Function
1	Voltage Control
7	Ground
8	Output
14	+Vs

MD140028-1
 Unit = mm

Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F_{nom}			30.0		MHz	
HCMOS	Logic Level 1	With 15 pF typ. load	0.9*Vcc			V	
	Logic Level 0				0.1*Vcc	V	
	Rise / Fall Time				6	ns	
	Duty Cycle		40	50	60	%	
Power Supply							
Voltage	V_{cc}		4.75	5.00	5.25	V	
Current Consumption		Steady-state, +25°C			20	mA	
Frequency Control*							
Control voltage range	V_c		1.50	2.50	3.50	V	Tuning Slope Positive
Tuning range			+/- 27			ppm	
Frequency Stability							
Versus temperature		-20°C to +55°C, ref 25°C	-0.5		+0.5	ppm	
Tolerance at 25°C		ref 25°C at center control	-1.0		+1.0	ppm	
5% change in supply voltage			-0.1		+0.1	ppm	
5% change in load			-0.1		+0.1	ppm	
First Year Aging			-1.0		+1.0	ppm	
Environmental Conditions							
Operating temperature range		-20°C to +55°C					
Storage temperature range		-40°C to +85°C					