Features and Benefits

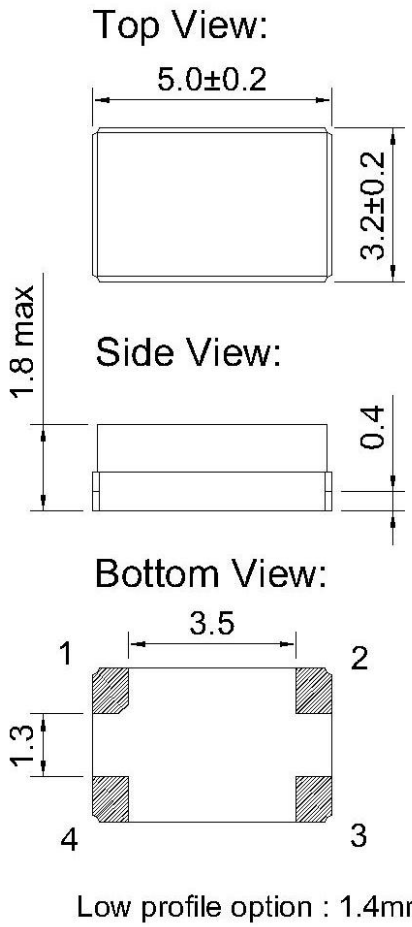
Better than +/- 1 ppm from -40℃ to +85℃
10MHz HCMOS output
5.0 x 3.0mm SMD package

Typical Applications

Mobile Radio
GPS Reference
Beidou Navigation Systems

Mechanical Drawing & Pin Connections

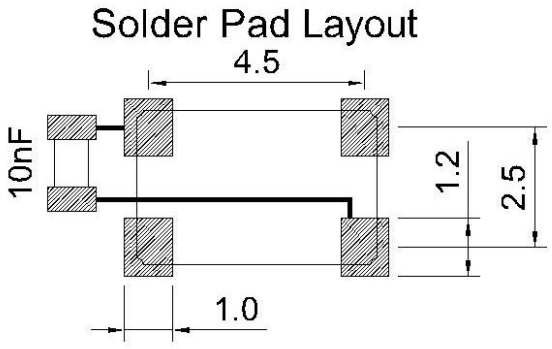
Drawing No: MD150006-1



Pad Connections:

1	Voltage Control / NC
2	GND
3	Output
4	+Vs

Unit : mm



Low profile option : 1.4mm max height

Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F_{nom}			10.000000		MHz	
Output Wave Form				HCMOS			
Output level "1"			90% Vs				
Output level "0"					10 Vs		
Rise and Fall time					8	ns	
Duty Cycle			45	55		%	
Output Load					15	pF	
Power Supply							
Supply Voltage	V_{cc}		2.97	3.3	3.63	V	
Supply Current				2.0		mA	
Frequency Control							
Control Voltage			0.5	1.5	2.5	V	
Pulling Range			+/-5			ppm	
Linearity					2	%	
Slope				Positive			
Input Resistance			100			Kohm	
Modulation bandwidth			2			KHz	
Frequency Stability							
VS. Temperature		-40°C to +85°C			+/-1	ppm	
VS. Supply Voltage		Supply voltage varied +/-5% at 25°C		+/-0.1		ppm	
VS. Load Change		+/-5pF load change		+/-0.2		ppm	
First Year Aging		First year at 25°C			+/-1	ppm	
SSB Phase noise (typ.)		10 Hz		-85		dBc/Hz	
		100 Hz		-118			
		1 KHz		-135			
		10 KHz		-143			
		100KHz		-145			

Environmental Conditions		
Parameter	**Reference Std.**	**Test Condition**
Operating temperature range	-40°C to +85°C	
Storage temperature range	-55°C to +125°C	
Shock	IEC 60068-2-27	1500G,acceleration for 0.5ms, 3 shocks in each of 3 mutually perpendicular planes
Vibration	IEC 60068-2-6	10Hz – 60Hz 1.5mm displacement, 60-2000Hz at 20G, 4hours in each of three mutually perpendicular.