

Excequal

Clock Oscillator

CO53

1.544MHz ~ 77.760MHz HCMOS/TTL 15pF or 10TTL

MECHANICAL DIMENSIONS	ELECTRICAL SPECIFICATION																			
<p>Recommended Soldering Pattern</p>	<p>Frequency range</p>	<p>1.5440MHz to 77.760MHz All combination of Frequency range Vs. Package type might not be available ,please contact factory</p>																		
	<p>Frequency Stability vs. Temperature vs. Aging</p>	<p>± 10 ppm to ±50ppm ±3.0 ppm max/ year</p>																		
	<p>Temperature Range Operating Storage</p>	<p>See Table 2 -55°C to 105°C</p>																		
	<p>Supply Voltage</p>	<p>3.3V ± 5% 5.0V ± 5%</p>																		
	<p>Input Current 3.3 V , 5V</p>	<p>1.544MHz ~ 77.760MHz 10mA max ~ 60mA max</p>																		
	<p>Output characteristics HCMOS / TTL</p>	<table border="1"> <thead> <tr> <th></th> <th>HCMOS</th> <th>TTL</th> </tr> </thead> <tbody> <tr> <td>Logic "1"</td> <td>90% Vdd min</td> <td>2.4V min</td> </tr> <tr> <td>Logic "0"</td> <td>10% Vdd max</td> <td>0.4V min</td> </tr> <tr> <td>Load</td> <td>15pF</td> <td>10TTL</td> </tr> <tr> <td>Duty Cycle</td> <td>40/60</td> <td>40/60</td> </tr> <tr> <td>Rise & Fall</td> <td>10nS max</td> <td>10nS max</td> </tr> </tbody> </table>		HCMOS	TTL	Logic "1"	90% Vdd min	2.4V min	Logic "0"	10% Vdd max	0.4V min	Load	15pF	10TTL	Duty Cycle	40/60	40/60	Rise & Fall	10nS max	10nS max
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	<p>Pull Characteristics</p>																			
	<p>Pulling Range</p>	<p>±50ppm / ±100 / ±150 ppm min</p>																		
	<p>Control Range</p>	<p>1.65V ± 1.5V (Vdd : 3.3V) 2.5V ± 2.5V (Vdd : 5.0V)</p>																		
OUTPUT WAVEFORM	ENVIROMENTAL & MECHANICAL SPECIFICATION																			
	<p>Shock Vibration Solderability Seal integrity Marking</p>	<p>MIL-STD-883C, Method 2002, Condition B MIL-STD-883C, Method 2007, Condition A MIL-STD-883C, Method 2003 MIL-STD-883C, Method 1014, Condition C & A2 MIL-STD-202F, Method 215</p>																		
	<p>TABLE1</p>																			
	<p>Symbol</p>	<p>Stability</p>																		
	<p>10</p>	<p>± 10ppm</p>																		
	<p>15</p>	<p>± 15ppm</p>																		
	<p>20</p>	<p>± 20ppm</p>																		
	<p>30</p>	<p>± 30ppm</p>																		
	<p>50</p>	<p>± 50ppm</p>																		
	<p>100</p>	<p>±100ppm</p>																		
	<p>TABLE2</p>																			
	<p>Symbol</p>	<p>Temp.</p>	<p>Symbol</p>	<p>Temp.</p>																
	<p>0</p>	<p>0°C</p>	<p>A</p>	<p>50°C</p>																
	<p>1</p>	<p>-10°C</p>	<p>B</p>	<p>60°C</p>																
	<p>2</p>	<p>-20°C</p>	<p>C</p>	<p>70°C</p>																
	<p>3</p>	<p>-30°C</p>	<p>D</p>	<p>75°C</p>																
	<p>4</p>	<p>-40°C</p>	<p>E</p>	<p>80°C</p>																
			<p>F</p>	<p>85°C</p>																
TEST CIRCUIT																				