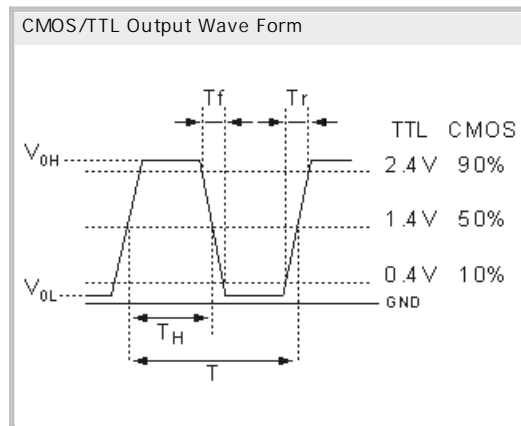
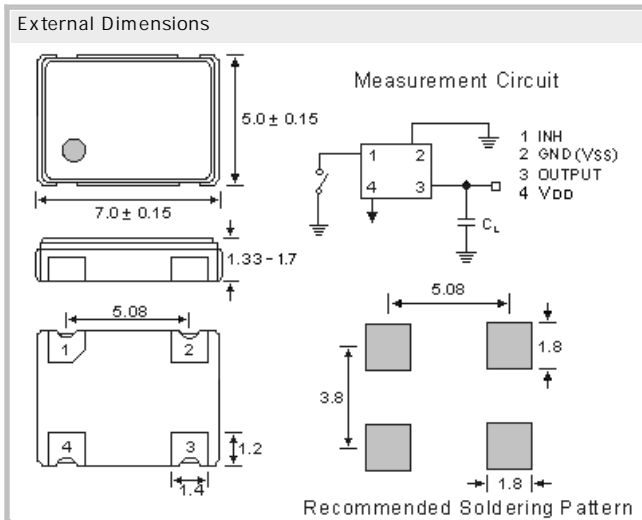


EMI Reducing Spread Spectrum Clock Oscillator CSS7050TR3.3 3.3V

- SMD in ceramic case (7.0 x 5.0 x 1.8) mm
- Tri-State Enable / Disable
- CMOS/TTL Square Wave
- on Tape & Reel (Tape 16mm, 1000pcs per reel)
- RoHS conform; Lead-free product
- Vibration: MIL-STD-202F method 204, 35G, 50 to 2000 Hz
- Shock: MIL-STD-202F method 213B, test cond. E, 1000G 1/2 sine wave
- Available in many standard and special frequencies



Specifications

Holder Type:	CSS7050TR3.3 Tri-State 3.3V (Voltage code is " 3.3 ")									
Frequency Range:	3.500 MHz to 165.000 MHz									
Frequency Stability at 25°C:	± 20 to ± 100 ppm									
Operating Temperature Range:	-20°C to +70°C, -40°C to +85°C (Inclusive Operating Temp., Supply Voltage, & Load)									
Storage Temperature:	-55°C to +125°C									
Spread Type (%):	<table border="1"> <thead> <tr> <th>Total %</th> <th>Down Spread (D)</th> <th>Center Spread (C)</th> </tr> </thead> <tbody> <tr> <td>-1%</td> <td>-1% (D1)</td> <td>± 0.5 (C0.5)</td> </tr> <tr> <td>-3%</td> <td>-3% (D3)</td> <td>± 1.5 (C1.5)</td> </tr> </tbody> </table>	Total %	Down Spread (D)	Center Spread (C)	-1%	-1% (D1)	± 0.5 (C0.5)	-3%	-3% (D3)	± 1.5 (C1.5)
Total %	Down Spread (D)	Center Spread (C)								
-1%	-1% (D1)	± 0.5 (C0.5)								
-3%	-3% (D3)	± 1.5 (C1.5)								
EMI Reduction:	-9 dBc min. 100 MHz at C0.5, -15 dBc min. 100MHz at C1.5 With respect to the dB level when no modulation. EMI reduction applies to the whole spectrum.									
Power Supply Voltage (Vdd):	+ 3.3V D.C. ± 5 %									
Maximum Supply Current:	10mA typ. (10.000MHz ~ 50.000MHz), 18mA typ. (50.000MHz ~ 100.000MHz), 35mA typ. (100.000MHz ~ 160.000MHz)									
Modulation Carrier Freq. (Dither rate):	6.9 kHz min.; 55.5kHz max. Frequency dependent									
Output Load:	15pF CMOS									
Output Symmetry (Duty Cycle):	50% ± 5 % CL=15pF; 50% Vdd									
Output Voltage (VOH) (VOL):	2.4V min; 3.2V typical 90% of Vdd min. 0.5V max; 0.2V typical 10% of Vdd max.									
Rise/Fall Time (10% to 90% Vdd):	4 ns max.									
Start Up Time:	2 ms typical; 5 ms max.									
Cycle-to-Cycle Jitter:	± 250 ps typical; ± 300 ps max.									
Tri-state Function Pin 1:	Pin 1 = H or open.... Output active at pin 3 Pin 1 = L.... high impedance at pin 3; Output enable/disable time: 100ns max.									
Aging:	< ± 5ppm max. / year (max.)									
Reflow Condition:	260°C max for 10 sec.									
See also ...:	http://www.comtec-crystals.com/docs/G/GFG2.htm									

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