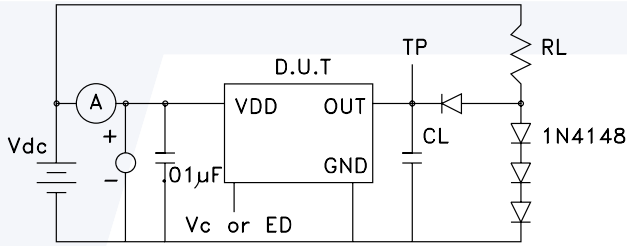


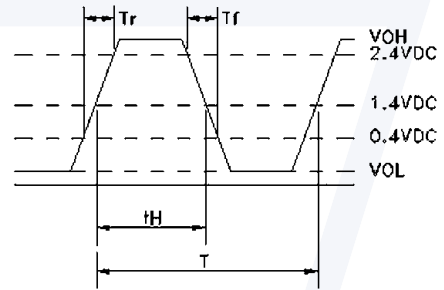
QUARTZ CRYSTAL OSCILLATORS

Test Circuit TTL



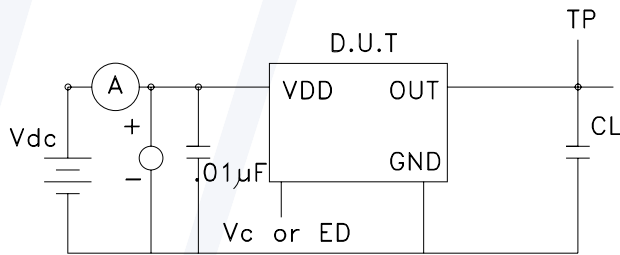
RL = 2.0kΩ (2TTL)
 RL = 820 Ω (2TTL)
 RL = 390 Ω (2TTL)
 CL = 15pF (including probe capacitance)

TEST WAVEFORM

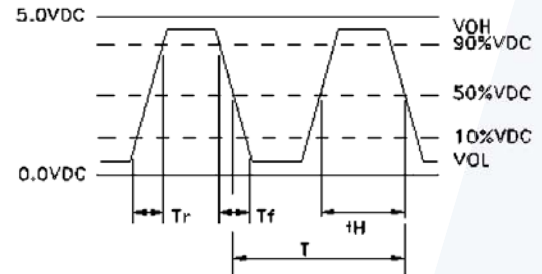


Symmetry = $\frac{t_H}{T} \times 100\%$

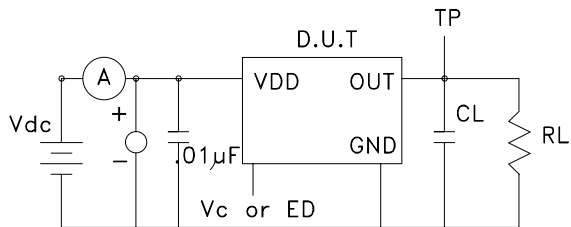
Test Circuit HCMOS



CL = 15pF (including probe capacitance)



Test Circuit Clipped Sine



RL = 10kΩ
 CL = 15pF (including probe capacitance)

SINE OUTPUT

