

FEATURES

- HIGH RELIABILITY FOR LOW COST
- FREQUENCY STABILITY TO ± 15 PPM
- JITTER OPTIMIZED DIP 14 CLOCK OSCILLATOR
- EXCELLENT CLOCK SIGNAL GENERATOR FOR DSP'S AND CPU'S
- EXTENDED TEMPERATURE RANGE TO $-40/+85^{\circ}\text{C}$

PETERMANN

TECHNIK

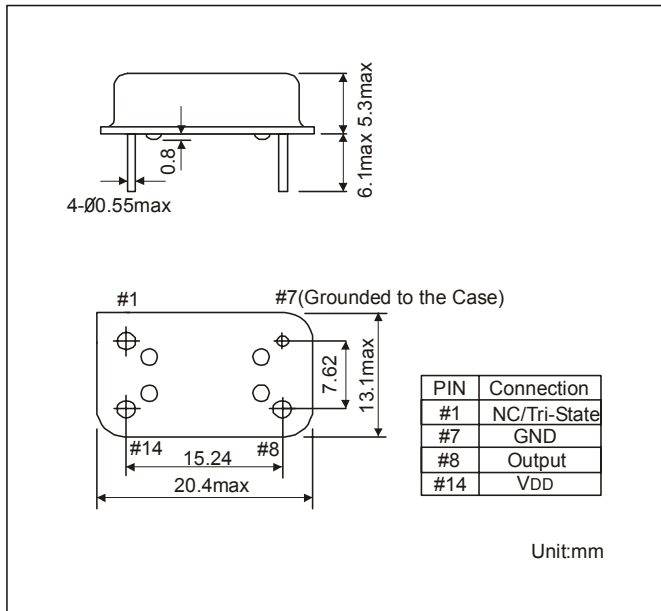
Time & Frequency Components

SERIES			M2500		
PACKAGE			14 PIN DIP		
FREQUENCY RANGE			32.768 kHz ~ 125.0 MHz		
FREQUENCY STABILITY			+-15 ~ +-100 ppm		
AGING			+-5 ppm after first year		
OPERATING TEMPERATURE RANGE			0/+70°C ~ -40/+85°C		
STORAGE TEMPERATURE RANGE			-55/+125°C		
INPUT		VOLTAGE	+5.0 VDC +-10%		
		CURRENT	30 mA max. < 24.0 MHz		
			40 mA max. < 50.0 MHz		
			60 mA max. < 80.0 MHz		
			80 mA max. < 125 MHz		
OUTPUT	SYMMETRY	STANDARD	40/60%		
		OPTION	45/55%		
	RISE AND FALL TIME HCMOS		10 ns max. (10% VDD ~ 90% VDD)		
	RISE AND FALL TIME TTL		10 ns max. (0.4V ~ 2.4V)		
	"0" LEVEL	HCMOS 5.0 VOLT	10% VDD max.		
	"1" LEVEL		90% VDD min.		
	"0" LEVEL	TTL 5.0 VOLT	0.4 V max.		
	"1" LEVEL		2.4 V min.		
	LOAD	TTL	10 TTL		
		HCMOS	15 pF		
PIN 1		STANDARD	WITHOUT ENABLE/DISABLE FUNCTION		
		OPTION	WITH ENABLE/DISABLE FUNCTION		
TRISTATE LOGIC TABLE			PIN 1 INPUT		PIN 8 OUTPUT
			2.0V MIN. OR NOT CONNECTED		OSCILLATION
			0.8V MAX. OR GND		HIGH IMPEDANCE
PIN CONNECTION			SEE OUTLINE DRAWINGS		
START-UP TIME			10 ms max.		
PERIOD JITTER RMS			8 ps max.		
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION					

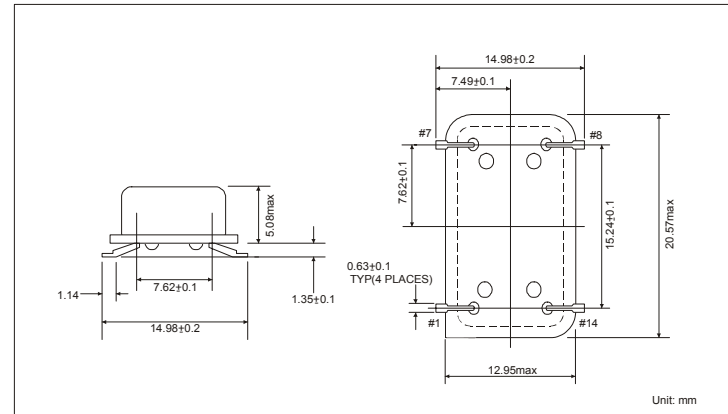
PART NUMBERING SYSTEM

EXAMPLE	M2500-25-W-S-E-G-125.0MHz
SERIES	M2500
FREQUENCY STABILITY	BLANK FOR 100 PPM
	ANY 50 ~ 15 PPM
TEMPERATURE RANGE	BLANK FOR $0/+70^{\circ}\text{C}$
	N = $-10/+60^{\circ}\text{C}$
	M = $-20/+70^{\circ}\text{C}$
	W = $-40/+85^{\circ}\text{C}$
SYMMETRY	BLANK FOR 40/60%
	S FOR 45/55%
PIN 1 ENABLE/DISABLE	BLANK FOR NO E/D
	E FOR E/D
PIN CONFIGURATION	BLANK FOR DIP
	G FOR GULL WING
FREQUENCY	REQUIRED FREQUENCY

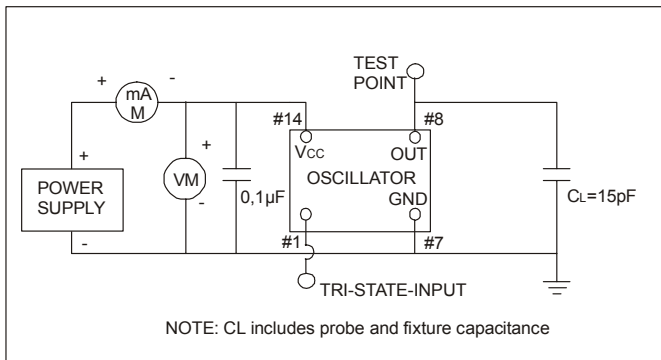
OUTLINE DRAWING OF M2500



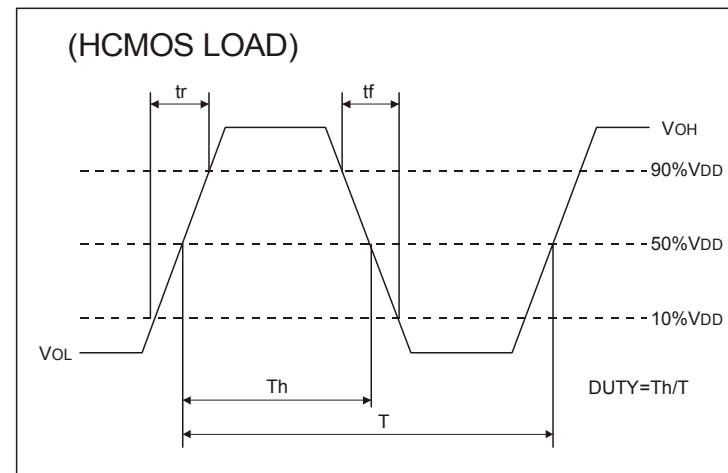
OUTLINE DRAWING OF M2500 GULL WING



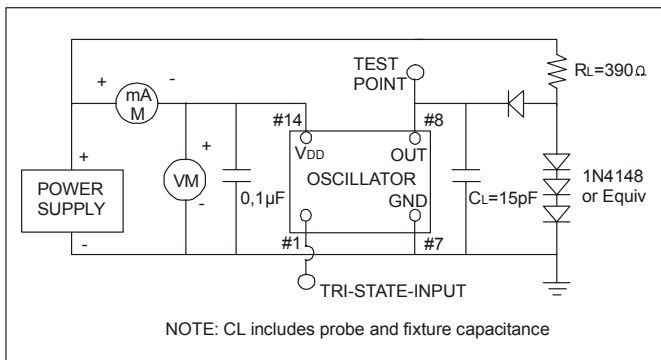
TEST CIRCUIT FOR HCMOS



HCMOS OUTPUT WAVE FORM



TEST CIRCUIT FOR TTL



TTL OUTPUT WAVE FORM

