

# FEATURES

PETERMANN

TECHNIK

Time & Frequency Components

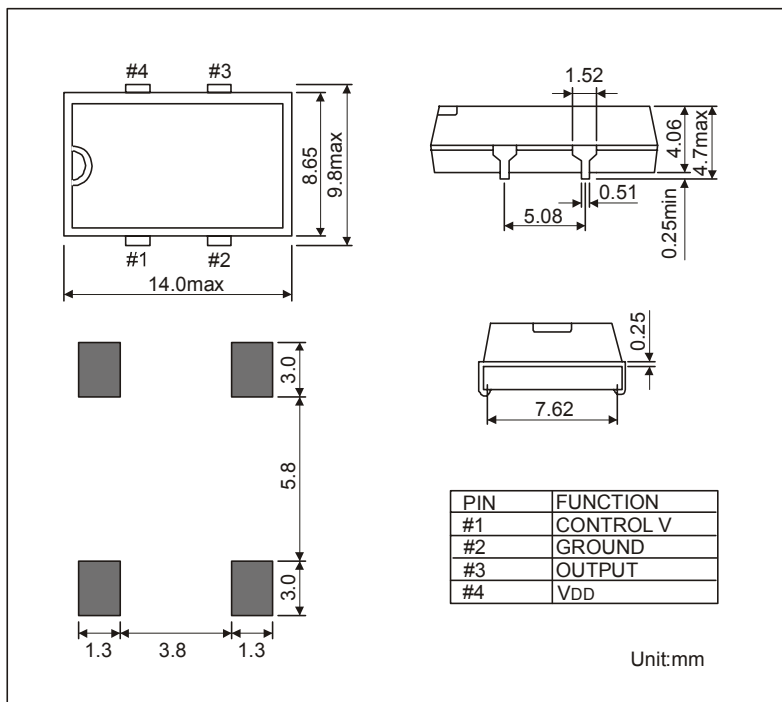
- HIGH RELIABILITY FOR LOW COST
- FREQUENCY STABILITY OF +/-15 PPM AVAILABLE
- AVAILABLE IN 5.0 AND 3.3 VOLT
- EXCELLENT JITTER PERFORMANCE
- CHEAPEST AVAILABLE SMD-VCXO IN PLASTIC PACKAGE
- EXTENDED TEMPERATURE RANGE TO -40/+85°C AVAILABLE
- APPLICATIONS: FIBER CHANEL, GIGABIT ETHERNET, SET-TOP BOX, BROADBAND, TELECOM, ETC.

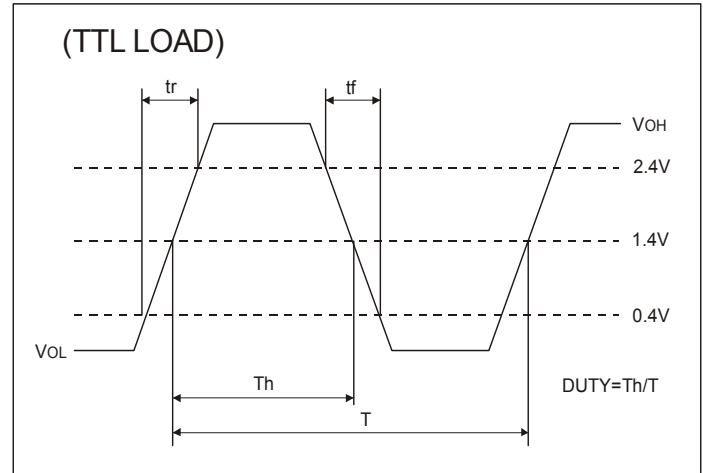
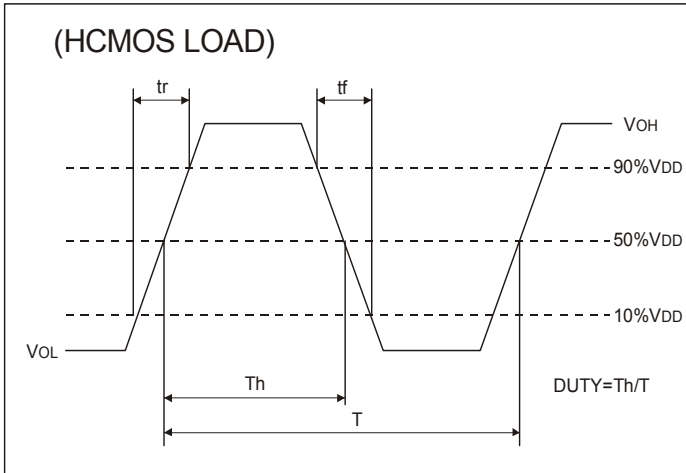
SERIES		M3514	
PACKAGE		PLASTIC PACKAGE 14 x 9.8 x 4.7 mm	
FREQUENCY RANGE	5.0 VOLT	1.0 ~ 40.0 MHz	
	3.3 VOLT	1.0 ~ 40.0 MHz	
FREQUENCY STABILITY	VS. TEMPERATURE	+-15 ~ +-100 ppm max.	
	VS. SUPPLY VOLTAGE	+5 ppm max.	
	VS. LOAD	+-1 ppm max.	
	VS. AGING	+-5 ppm max. / first year	
OPERATING TEMPERATURE RANGE		-10/+60°C ~ -40/+85°C	
STORAGE TEMPERATURE RANGE		-55/+125°C	
INPUT	VOLTAGE	+5.0 VDC +-5%	+3.3 VDC +-5%
	CURRENT	30 mA max. < 30.0 MHz	20 mA max. < 30.0 MHz
		40 mA max. < 40.0 MHz	25 mA max. < 40.0 MHz
OUTPUT	SYMMETRY	STANDARD	40/60%
		OPTION	45/55%
	SIGNALS FOR 5.0 VOLT		HCMOS AND TTL
	SIGNAL FOR 3.3 VOLT		HCMOS ONLY
	RISE AND FALL TIME FOR HCMOS		10 ns max. (10% VDD TO 90% VDD)
	RISE AND FALL TIME FOR TTL		10 ns max. (0.4 TO 2.4 VOLT)
	"0" LEVEL	HCMOS 5.0 AND 3.3 VOLT	10% VDD
	"1" LEVEL		90% VDD
	"0" LEVEL	TTL 5.0 VOLT ONLY	0.4 VDC
	"1" LEVEL		2.4 VDC
LOAD	HCMOS 5.0 AND 3.3 VOLT	15 pF	
	TTL 5.0 VOLT ONLY	10 TTL	
START-UP TIME		10 mS max.	
INPUT IMPEDANCE		50 kΩ min.	
PERIOD JITTER RMS		8 ps max.	
CONTROL VOLTAGE		0 ~ 5.0 VDC	0 ~ 3.3 VDC
CENTER VOLTAGE		2.5 VDC	1.65 VDC
PULLABILITY		+-100 ppm min.	
LINEARITY		10% max.	
SLOPE		POSITIVE	
PIN CONNECTION	PIN 1	CONTROL VOLTAGE	
	PIN 2	GROUND	
	PIN 3	OUTPUT	
	PIN 4	SUPPLY VOLTAGE	
<b>OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION</b>			

**PART NUMBERING GUIDE**

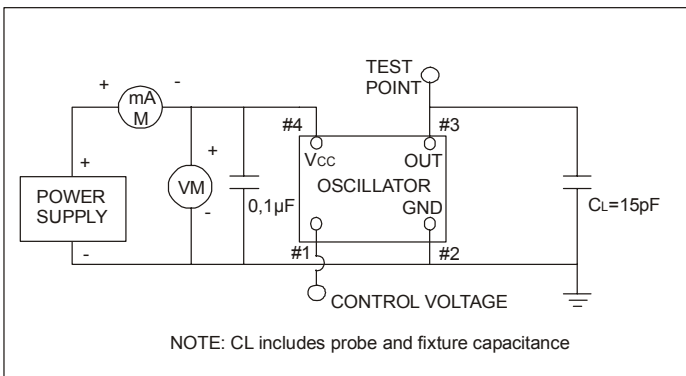
EXAMPLE	M3314-25-W-S-VX3-50-27.000MHz-T
SERIES	M3514 FOR 5 VOLT M3314 FOR 3.3 VOLT
STABILITY VS. TEMPERATURE	BLANK = +/- 100 ppm 50 = +/-50 ppm 25 = +/-25 ppm 20 = +/-20 ppm 15 = +/-15 ppm X = OTHER VALUE - PLEASE INDICATE YOUR REQUIRED VALUE
TEMPERATURE RANGE	BLANK = 0/+70°C N = -10/+60°C M = -20/+70°C W = -40/+85°C X = OTHER VALUE - PLEASE INDICATE YOUR REQUIRED VALUE
SYMMETRY	BLANK = 40/60% S = 45/55% VX = 0 ~ 5.0 V FOR 5 VOLT VERSION VX3 = 0 ~ 3.3 V FOR 3.3 VOLT VERSION
PULLING RANGE	BLANK = +/-100 ppm min. IF YOU REQUIRE ANOTHER VALUE PLEASE INDICATE THE REQUIRED VALUE
FREQUENCY	FREQUENCY IN MHz
TAPE AND REEL PACKAGE	-T

**OUTLINE DRAWING M3514 AND M3314**

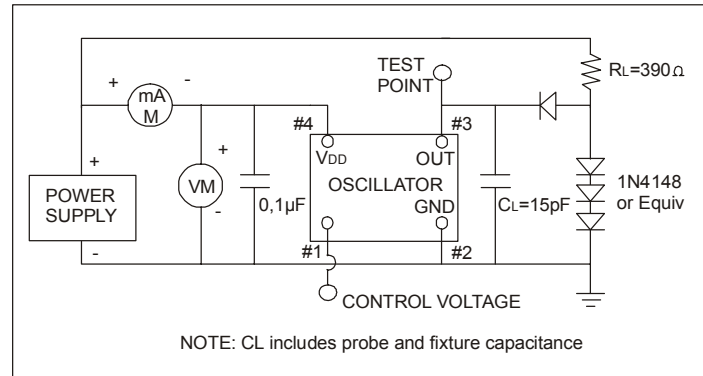




**TEST CIRCUIT FOR HCMOS**



**TEST CIRCUIT FOR TTL**



**REFLOW SOLDER PROFILE**

