

FEATURES

PETERMANN

TECHNIK

Time & Frequency Components

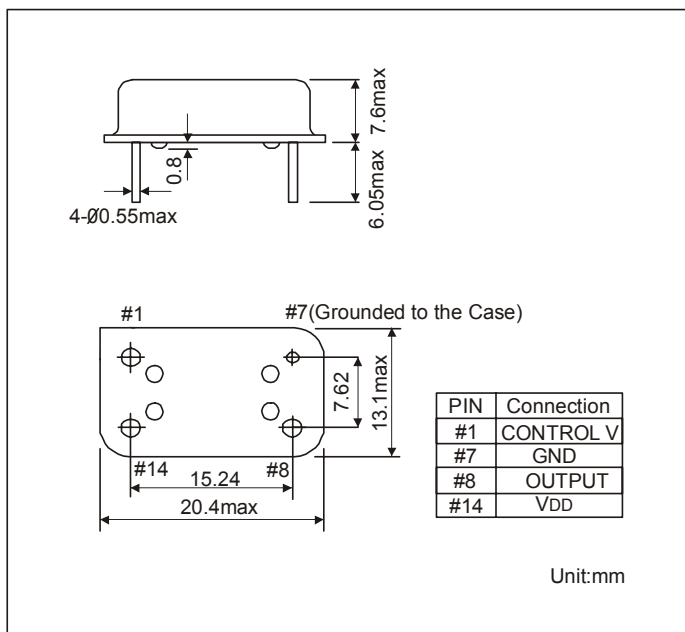
- HIGH RELIABILITY FOR LOW COST
- WIDE FREQUENCY RANGE UP TO 700.0 MHz
- AVAILABLE IN 5.0 AND 3.3 VOLT
- EXCELLENT JITTER PERFORMANCE
- CHEAPEST AVAILABLE LEADED VCXO IN DIP PACKAGE WITH PECL OUTPUT SIGNAL
- EXTENDED TEMPERATURE RANGE TO -40/+85°C AVAILABLE
- APPLICATIONS: FIBER CHANEL, GIGABIT ETHERNET, SDH/SONET, BROADBAND, TELECOM, ETC.

SERIES			M7502	
PACKAGE			DIP 14 PACKAGE	
FREQUENCY RANGE		5.0 VOLT	96.0 ~ 160.0 MHz	
		3.3 VOLT	480.0 ~ 700.0 MHz	
FREQUENCY STABILITY		VS. TEMPERATURE	5 VOLT = +20 ~ +100 ppm max.	
			3.3 VOLT = +50 ~ +100 ppm	
		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	100 mA max.	100 mA max.
OUTPUT	SYMMETRY	STANDARD	40/60%	
		OPTION	45/55%	
	SIGNAL FOR 5.0 VOLT		PECL	
	SIGNAL FOR 3.3 VOLT		PECL	
	RISE AND FALL TIME		1.5 ns max. (20% TO 80% PECL)	
	"0" LEVEL	FOR PECL	VDD-1.62 V max.	
	"1" LEVEL		VDD-1.02 V min.	
	LOAD	FOR 5.0 VOLT	NO LOAD	
		FOR 3.3 VOLT	50 Ω to VDD-2VDC	
START-UP TIME			10 mS max.	
INPUT IMPEDANCE			50 kΩ min.	
PERIOD JITTER RMS			25 ps typ. for 5.0 volt version	
			8 ps typ. for 3.3 volt version	
CONTROL VOLTAGE RANGE STANDARD			0.5 ~ 4.5 VDC	0 ~ 3.3 VDC
CONTROL VOLTAGE OPTIONAL			0 ~ 5.0 VDC	
CENTER VOLTAGE			2.5 VDC	1.65 VDC
PULLABILITY			+50 ppm min.	
LINEARITY			10% max.	
SLOPE			POSITIVE	
PIN CONNECTION		PIN 1	CONTROL VOLTAGE	
		PIN 7	CASE GROUND	
		PIN 8	OUTPUT	
		PIN 14	SUPPLY VOLTAGE	
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION				

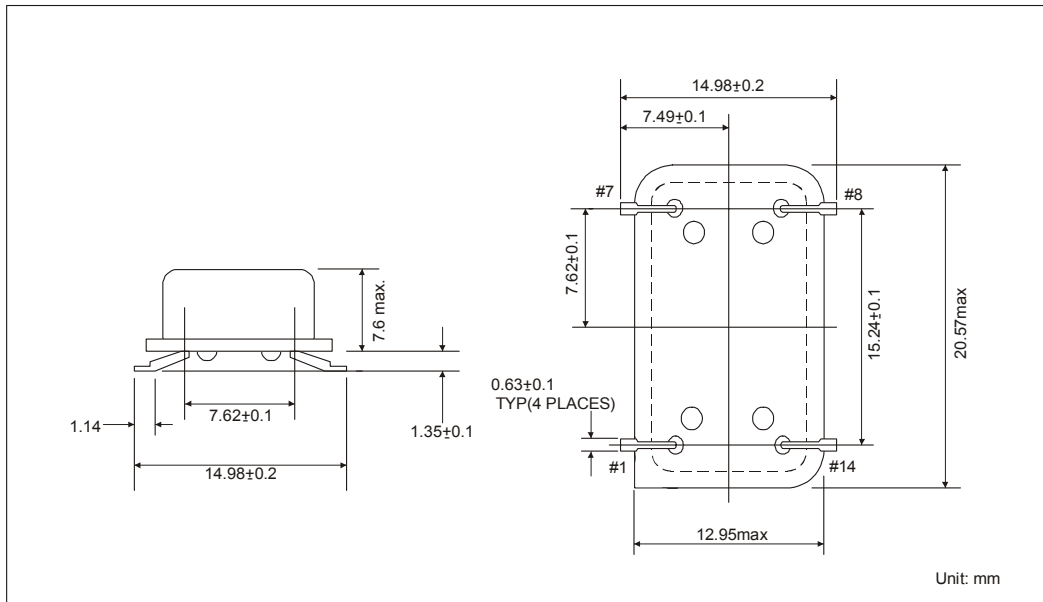
PART NUMBERING GUIDE

EXAMPLE	M7302-50-W-S-VX3-50-622.08MHz
SERIES	M7502 FOR 5 VOLT M7302 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%
CONTROL VOLTAGE	V = 0.5 ~ 4.5 V FOR 5 VOLT VERSION VX = 0 ~ 5.0 V FOR 5 VOLT VERSION V3 = 0.3 ~ 3.0 V FOR 3.3 VOLT VERSION VX3 = 0 ~ 3.3 V FOR 3.3 VOLT VERSION
PULLING RANGE	BLANK = +-50 ppm min. IF YOU REQUIRE ANOTHER VALUE PLEASE INDICATE THE REQUIRED VALUE
FREQUENCY	FREQUENCY IN MHz
SMD-GULLWING PACKAGE	G

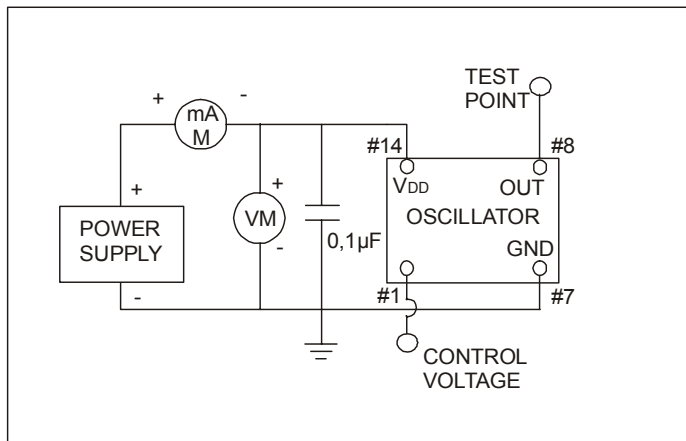
OUTLINE DRAWING OF M7502 AND M7302



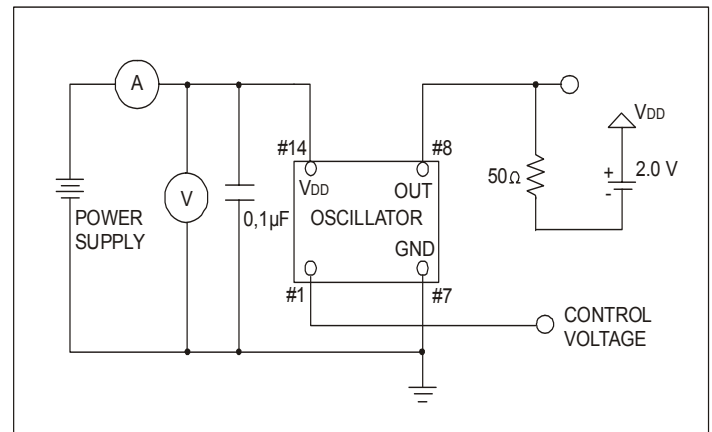
OUTLINE DRAWING OF SMD-GULLWING PACKAGE



TEST CIRCUIT FOR PECL TYPE M7502



TEST CIRCUIT FOR PECL TYPE M7302



OUTPUT WAVE FORM OF PECL

