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 LEADED VCXO IN DIP PACKAGE
- EXTENDED TEMPERATURE RANGE TO -40/+85°C AVAILABLE
- APPLICATIONS: FIBER CHANEL, GIGABIT ETHERNET, SET-TOP BOX, BROADBAND, TELECOM, ETC.

SERIES			M3500	
PACKAGE			DIP 14 PACKAGE	
FREQUENCY RANGE		5.0 VOLT	1.0 ~ 54.0 MHz	
		3.3 VOLT	1.0 ~ 54.0 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
			45 mA max. < 54.0 MHz	30 mA max. < 54.0 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 RANGE STANDARD			0.5 ~ 4.5 VDC	0.3 ~ 3.0 VDC
CONTROL VOLTAGE OPTIONAL			0 ~ 5.0 VDC	0 ~ 3.3 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				

PETERMANN-TECHNIK | Amselweg 8 | D-86916 Kaufering
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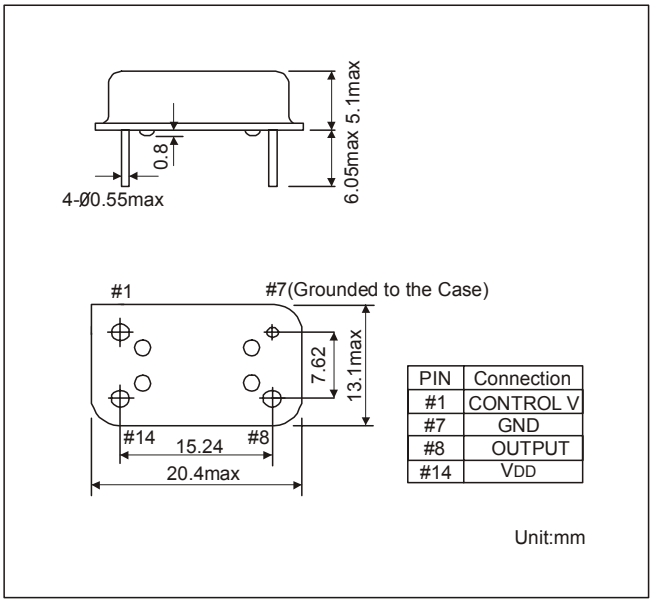
PART NUMBERING GUIDE

EXAMPLE	M3300-25-W-S-VX3-50-27.000MHz

SERIES	M3500 FOR 5 VOLT
	M3300 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 M3500 AND M3300



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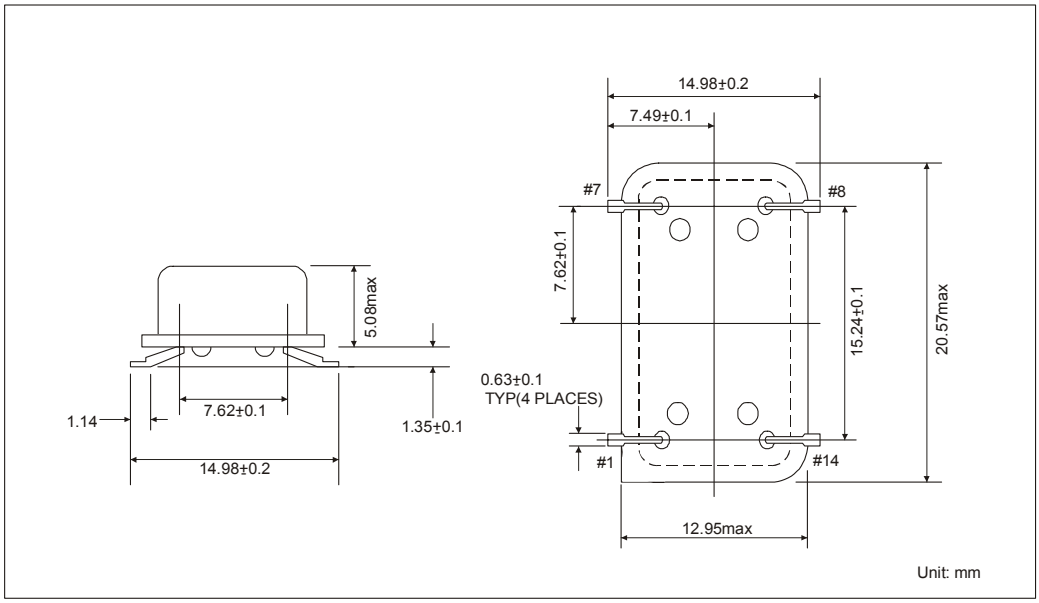
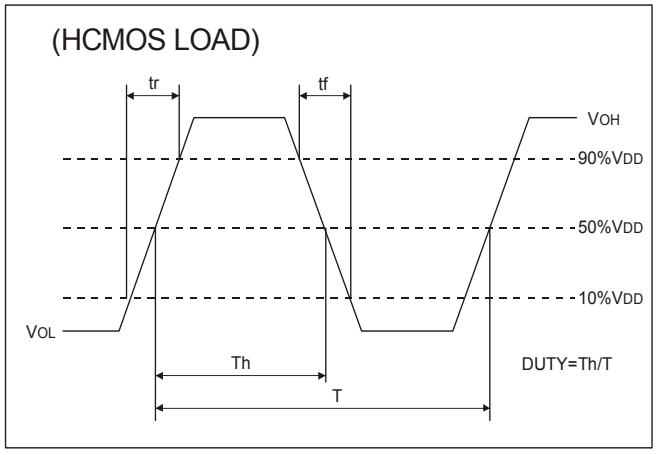
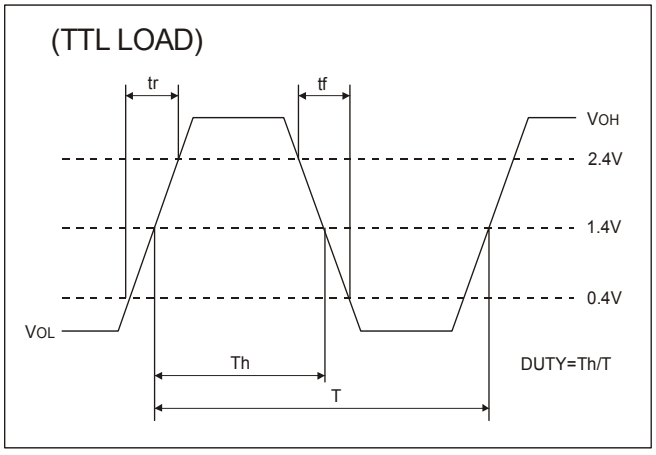
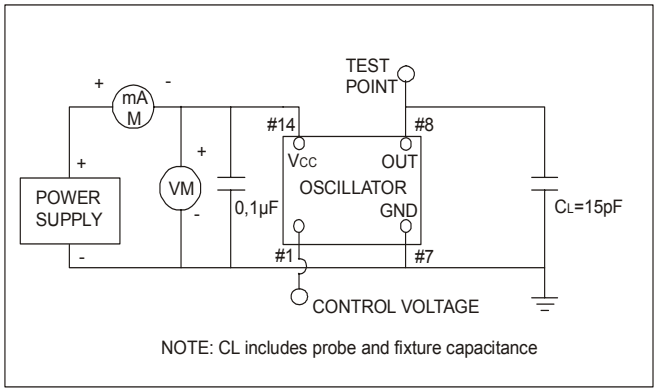
OUTLINE DRAWING OF SMD-GULLWING PACKAGE



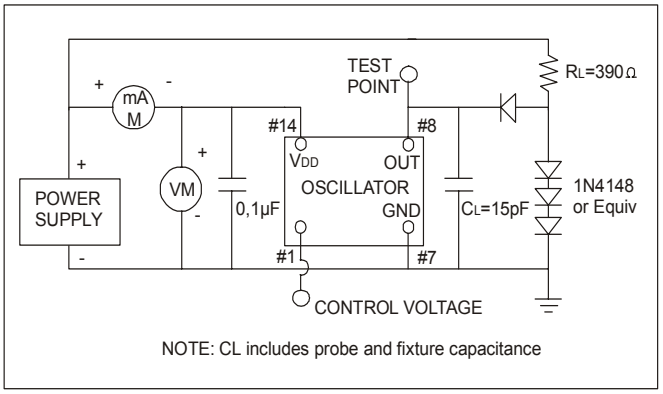




TEST CIRCUIT FOR HCMOS



TEST CIRCUIT FOR TTL



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