

FEATURES

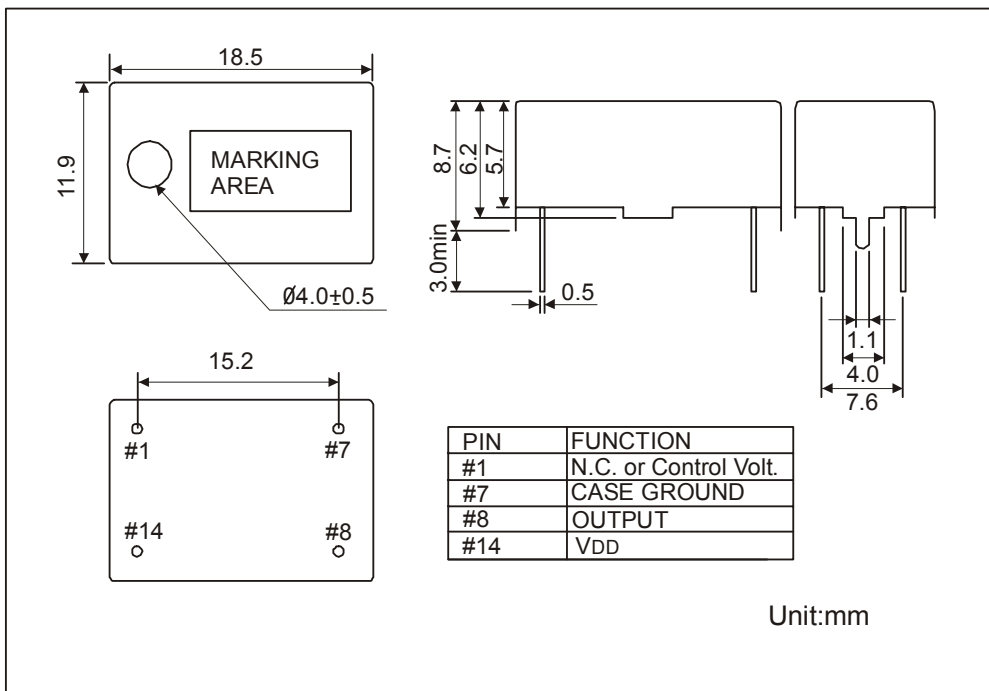
- HIGH RELIABILITY FOR LOW COST
- AVAILABLE AS TCXO AND VCTCXO
- TEMPERATURE STABILITY OF +/-1 PPM AVAILABLE
- EXCELLENT PHASE NOISE PERFORMANCE
- LOW POWER CONSUMPTION
- CHEAPEST AVAILABLE LEADED TCXO IN DIP PACKAGE
- EXTENDED TEMPERATURE RANGE TO -40/+85°C AVAILABLE

SERIES		M4318		
PACKAGE		DIP 14 PACKAGE		
FREQUENCY RANGE	HCMOS / TTL	2.0 ~ 51.84 MHz		
	CLIPPED SINE WAVE	10.0 ~ 51.84 MHz		
FREQUENCY STABILITY	VS. TEMPERATURE	+/-1 ~ +/-5 ppm		
	VS. SUPPLY VOLTAGE	+0.5 ppm max. / 3.3VDC +/-5%		
	VS. LOAD	+/-0.2 ppm max. / 10 pF ~ 20 pF		
	VS. AGING	+/-1 ppm max. per year		
OPERATING TEMPERATURE RANGE		-0/+50°C ~ -40/+85°C		
STORAGE TEMPERATURE RANGE		-40/+85°C		
INPUT	VOLTAGE	+3.3 VDC +/-5%		
	CURRENT	20 mA max. for HCMOS / TTL 2 mA max. for CLIPPED SINE WAVE		
OUTPUT	SYMMETRY	STANDARD	40/60% for HCMOS / TTL	
		OPTION	45/55% for HCMOS / TTL	
	SIGNALS		HCMOS / TTL	
			CLIPPED SINE WAVE	
	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	10% VDD max.	
	"1" LEVEL		90% VDD min.	
	"0" LEVEL	TTL	0.4 VDC max.	
	"1" LEVEL		2.4 VDC min.	
	CLIPPED SINE WAVE		0.7 V peak to peak min.	
	LOAD	HCMOS	15 pF	
TTL		2 TTL		
CLIPPED SINE WAVE		10 kΩ / 10 pF		
FREQUENCY ADJUSTMENT	STANDARD	+/-3 ppm min. per internal trimmer		
	OPTION	+/-5 ppm min. by external control voltage		
EXTERNAL CONTROL VOLTAGE		1.65 VDC +/-1.35 VDC		
PHASE NOISE (typical)	10 Hz offset from carrier		-80 dBc/Hz	
	100 Hz offset from carrier		-105 dBc/Hz	
	1 kHz offset from carrier		-140 dBc/Hz	
	10 kHz offset from carrier		-150 dBc/Hz	
	100 kHz offset from carrier		-155 dBc/Hz	
PIN CONNECTION	PIN 1	NOT CONNECTED OR CONTROL VOLTAGE		
	PIN 7	CASE GROUND		
	PIN 8	OUTPUT		
	PIN 14	SUPPLY VOLTAGE		
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION				

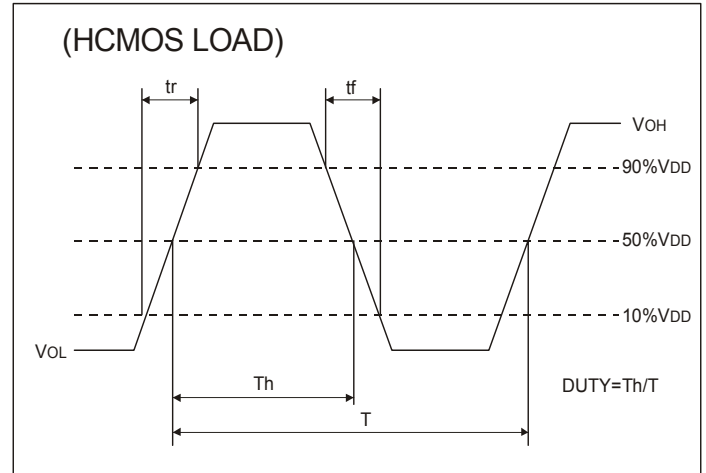
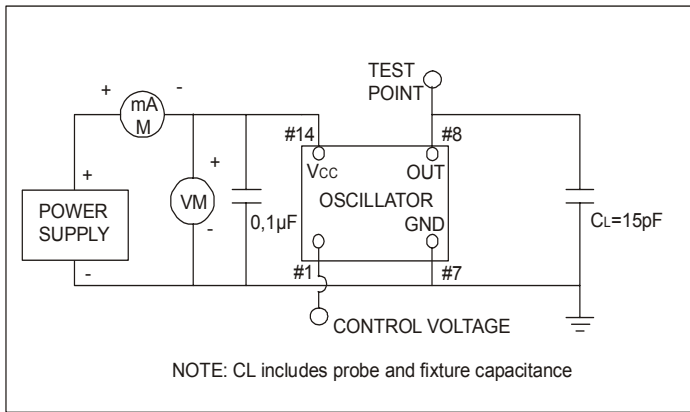
PART NUMBERING GUIDE

EXAMPLE	M4318-S-J-10-S-V-27.000MHz
SERIES	M4318
OUTPUT SIGNAL	S = CLIPPED SINE WAVE
	T = TTL
	H = HCMOS
TEMPERATURE RANGE	J = 0/+50°C
	N = -10/+60°C
	X = 0/+70°C
	M = -20/+70°C
	K = -30/+75°C
STABILITY VS. TEMPERATURE	W = -40/+85°C
	10 = +/-1.0 ppm
	15 = +/-1.5 ppm
	20 = +/-2.0 ppm
	25 = +/-2.5 ppm
SYMMETRY FOR HCMOS / TTL	50 = +/-5.0 ppm
	X = OTHER VALUE - PLEASE INDICATE YOUR REQUIRED VALUE
	BLANK = 40/60%
VCXO OPTION	S = 45/55%
	Blank = TCXO
FREQUENCY	V = VCTCXO (external voltage control 1.65 VDC +/-1.35 VDC for +/-5 ppm min.) FREQUENCY IN MHz

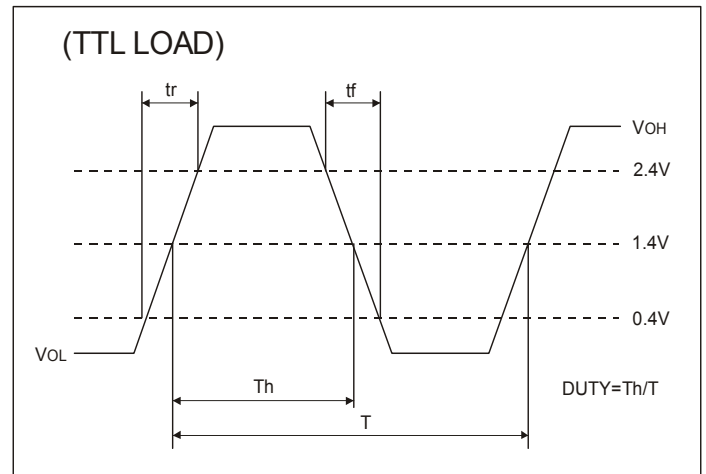
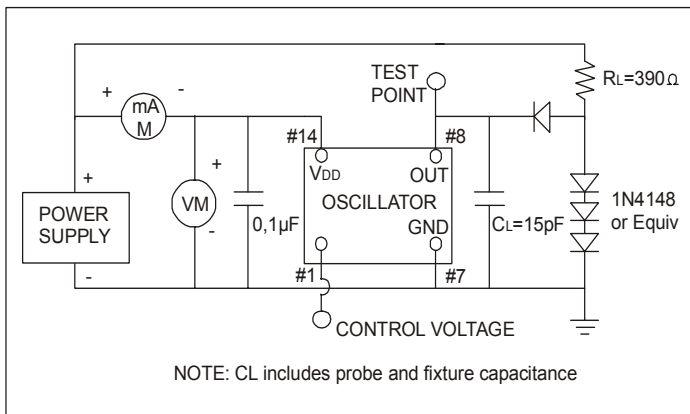
OUTLINE DRAWING M4318



TEST CIRCUIT FOR HCMOS



TEST CIRCUIT FOR TTL



TEST CIRCUIT FOR CLIPPED SINE WAVE

