

# FEATURES

PETERMANN



TECHNIK

Time & Frequency Components

- HIGH RELIABILITY FOR LOW COST
- 1.8 VDC SUPPLY VOLTAGE
- SUITABLE FOR PORTABLE APPLICATIONS
- LOW POWER CONSUMPTION
- JITTER OPTIMIZED SMALL LEADED OSCILLATOR
- EXTENDED TEMPERATURE RANGE TO -40/+85°C

<b>LEADED OSCILLATOR SERIES</b>		M2150	
<b>PACKAGE</b>		DIP 8 12.7 x 12.7 x 5.5 mm	
<b>FREQUENCY RANGE</b>		0.250 ~ 70.0 MHz	
<b>FREQUENCY STABILITY</b>	<b>VS. TEMPERATURE</b>	+15 ~ +-100 ppm	
	<b>VS. SUPPLY VOLTAGE</b>	+5 ppm max.	
	<b>VS. LOAD</b>	+1 ppm max.	
	<b>VS. AGING</b>	+5 ppm max. / 1 year	
<b>OPERATING TEMPERATURE RANGE</b>		0/+70°C ~ -40/+85°C	
<b>STORAGE TEMPERATURE RANGE</b>		-55/+125°C	
<b>INPUT</b>	<b>VOLTAGE</b>	+1.8 VDC +-10%	
	<b>CURRENT</b>	3 mA max. < 30 MHz / 18 mA max. < 70 MHz	
<b>OUTPUT</b>	<b>SIGNAL</b>	HCMOS	
	<b>SYMMETRY</b>	<b>STANDARD</b>	40/60% @50% VDD
		<b>OPTION</b>	45/55% @50% VDD
	<b>RISE AND FALL TIME</b>		10 nS max. (10% VDD to 90% VDD)
	<b>"0" LEVEL</b>		10% VDD max.
	<b>"1" LEVEL</b>		90% VDD min.
<b>LOAD</b>		15 pF	
<b>START-UP TIME</b>		10 ms max.	
<b>PERIOD JITTER RMS</b>		8 ps max.	
<b>PIN CONNECTION</b>		SEE OUTLINE DRAWING	
<b>DELIVERY FORM</b>		ANTISTATIC TRAYS	

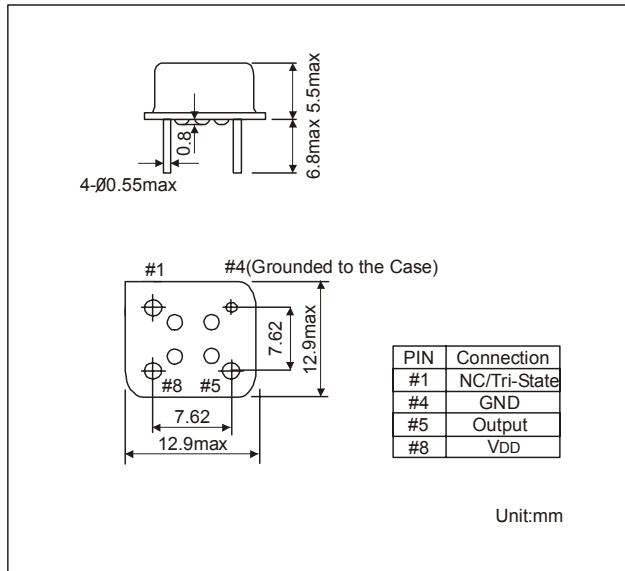
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION

## PART NUMBERING SYSTEM

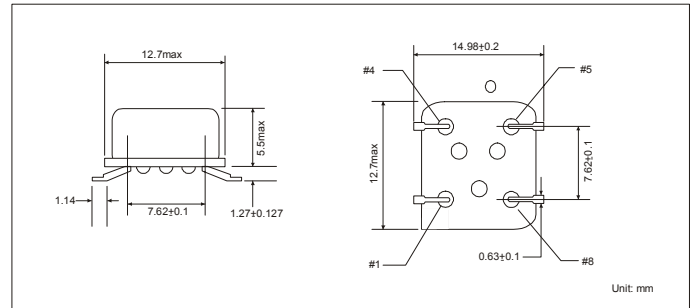
<b>EXAMPLE</b>	M2150-15-W-S-E-70.000MHz-T
<b>SERIES</b>	M2150
<b>FREQUENCY STABILITY VS. TEMPERATURE</b>	BLANK = 100 PPM
	50 = 50 PPM
	25 = 25 PPM
	20 = 20 PPM
<b>TEMPERATURE RANGE</b>	15 = 15 PPM
	BLANK FOR 0/+70°C
	N = -10/+60°C
	M = -20/+70°C
<b>SYMMETRY</b>	W = -40/+85°C
	BLANK = 40/60%
<b>TRI-STATE CONTROL</b>	S = 45/55%
	BLANK = NOT CONNECT
<b>FREQUENCY</b>	E = TRI-STATE
	REQUIRED FREQUENCY

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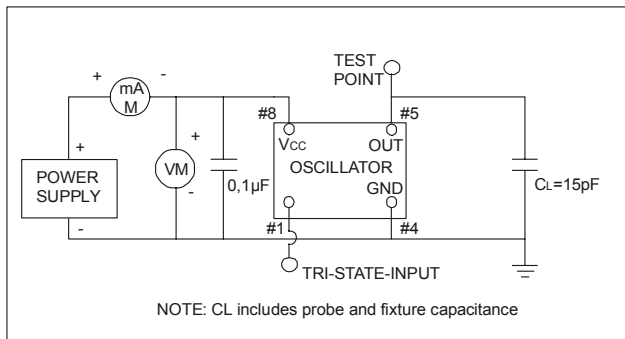
### OUTLINE DRAWING OF M2150



### OUTLINE DRAWING OF M2150 GULL WING



### TEST CIRCUIT FOR HCMOS



### HCMOS OUTPUT WAVE FORM

