FEATURES

PETERMANN TECHNIK
Time & Frequency Components

- HIGH RELIABILITY FOR LOW COST
- FREQUENCY STABILITY TO +-1.0 PPM
- LOW PACKAGE HEIGHT OF 4.7 MM MAX.
- EXTENDED TEMPERATURE RANGE TO -40/+85°C

SERIES		TC18
PACKAGE		14 PIN DIP
FREQUENCY RANGE		1.0 ~ 40.0 MHz
FREQUENCY ACCURACY		+-0.1 PPM max.
FREQUENCY STABILITY	**VS. AGING**	+-1 PPM per year max.
	VS. LOAD	+-0.1 PPM / load changement of +-10%
	VS. SUPPLY VOLTAGE	+-0.2 PPM / supply voltage changement of +-5 %
	VS. TEMPERATURE	see table 1
OPERATING TEMPERATURE RANGE		0/+50°C ~ -40/+85°C
STORAGE TEMPERATURE RANGE		-40/+100°C
SUPPLY VOLTAGE		+5.0 VDC +-5%
FREQUENCY CONTROL RANGE		+-7.0 PPM min. per internal trimmer
PHASE NOISE	**10 Hz**	-70 dBc/Hz
	100 Hz	-100 dBc/Hz
	1 kHz	-130 dBc/Hz
	10 kHz	-140 dBc/Hz
	100 kHz	-145 dBc/Hz
OUTPUT SIGNAL AND LOAD CHARACTERISTICS		see table 2
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION		

TABLE 1 - FREQUENCY STABILITY VS. TEMPERATURE

CODE	FREQUENCY STABILITY VS. TEMPERATURE	TEMPERATURE RANGE
A	+-1.0 PPM	0/+50°C
B	+-1.5 PPM	0/+70°C
C	+-2.0 PPM	-20/+70°C
D	+-3.0 PPM	-30/+75°C
E	+-5.0 PPM	-40/+85°C

TABLE 2 - OUTPUT WAVEFORM AND LOAD CHARACTERISTICS

OUTPUT WAVEFORM	OUTPUT TYPE CODE	FREQUENCY RANGE	OSCILLATION STATE	OUTPUT CHARACTERISTICS
CLIPPED SINE WAVE	0	8.000 ~ 40.000 MHz	F: FUNDAMENTAL	Load: 10 kΩ/10pF Output level: >1Vp-p Max. current = 10 mA
TTL	1	1.000 ~ 40.000 MHz	F: FUNDAMENTAL	Load: 10 low power consumption TTL "1" level: >+2.4 VDC / "0" level: <+0.2 VDC Duty Cycle: 40/60% / Tr and Tf: <6ns Max. current = 20 mA
HCMOS	2	1.000 ~ 40.000 MHz	F: FUNDAMENTAL	Load: 10 low power consumption TTL/HCMOS gates "1" level: >+4.5 VDC / "0" level: <+0.5 VDC Duty Cycle: 40/60% / Tr and Tf: <6ns Max. current = 20 mA
ACMOS	3	1.000 ~ 40.000 MHz	F: FUNDAMENTAL	Load: 10 low power consumption TTL/ACMOS gates "1" level: >+4.5 VDC / "0" level: <+0.5 VDC Duty Cycle: 40/60% / Tr and Tf: <6ns Max. current = 20 mA

PETERMANN-TECHNIK | Amselweg 8 | D-86916 Kaufering
Fon: 00 49 (0) 81 91 / 30 53 95 | Fax: 00 49 (0) 81 91 / 30 53 97
http://www.petermann-technik.de | info@petermann-technik.de

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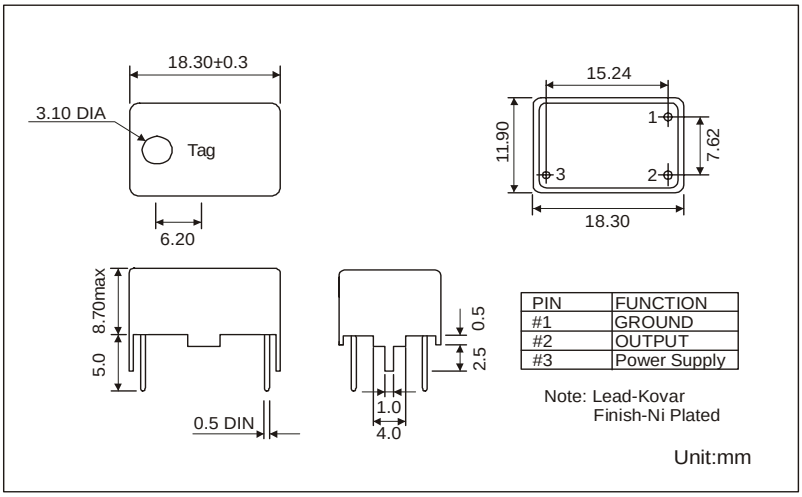
PART NUMBERING SYSTEM

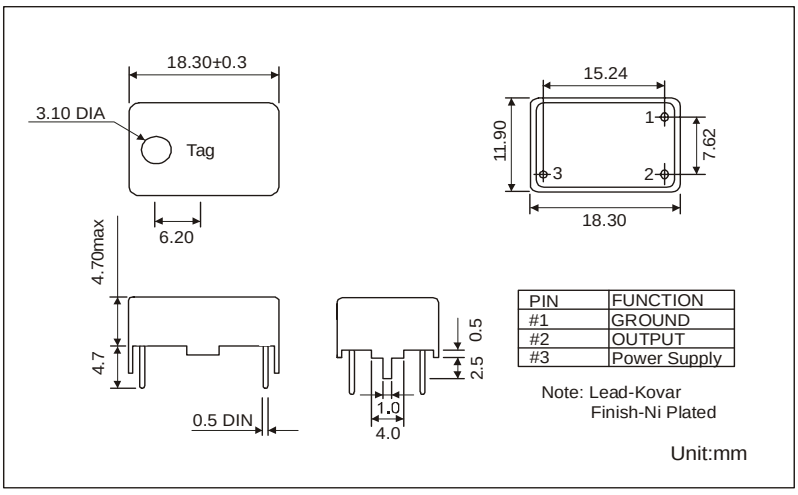
EXAMPLE	TC18L-F-A-2-10.000MHz

TYPE	PACAKGE STYLE	VERSION	FREQUENCY STABILTY VS. TEMPERATURE	OUTPUT TYPE - FREQUENCY
TC	18 18L	F for FUND.	SEE TABLE 1	SEE TABLE 2 - FREQUENCY

OUTLINE DRAWING OF TC18



OUTLINE DRAWING OF TC18L



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