PETERMANN-TECHNIK GmbH Lechwiesenstr. 13 • D-86899 • Landsberg am Lech Tel: +49/8191/305395 • Fax: +49/8191/305397 info@petermann-technik.com • www.petermann-technik.com



THT QUARTZ CRYSTAL

SERIES UM1/UM5

FEATURES

- + High reliability for low cost
- + Tight frequency stabilities possible
- + Extended temperature range to -40/+125°C available
- + Excellent clock signal generator for CPU's
- + Cheapest available crystal with tight tolerances up to 200 MHz



ROHS COMPLIANT

GENERAL DATA

PARAMETERS	PRODUCT FEATURES AND CONDITIONS
THT-CRYSTAL SERIES	UM1/UM5
NUMBER OF LEADS	2 = standard 3 = optional
FREQUENCY RANGE	6.0 ~ 45.0 MHz AT-FUNDAMENTAL 30.0 ~ 100.0 MHz 3rd Overtone 80.0 ~ 155.0 MHZ 5th Overtone 120.0 ~ 200.0 MHz 7th Overtone
FREQUENCY TOLERANCES AT 25°C	±5 ppm ~ ±50 ppm
LOAD CAPACITANCE (CL)	6 pF ~ 50 pF or Series
WORKING TEMPERATURE RANGES	0/+50°C ~ -40/+125°C
SHUNT CAPACITANCE (Co)	7 pF max.
DRIVE LEVEL	100 μW typical (0.07 mW ~ 1 mW possible on request)
AGING	±3 ~ ±5 ppm per year standard (±1 or ±2 ppm available as option)
INSULATION RESISTANCE	>500 MΩ DC/100V ±10%
STORAGE TEMPERATURE	-55°/+125°C
DELIVERY FORM	Bulks standard
OPTIONS FOR THT	Insulator Cutted leads Tape and Reel (Paper tape 1.000 pcs per reel)
SELECT YOUR REQUIRED CRYSTAL (PRODUCT CONFIGURATOR)	REQUEST CRYSTAL SAMPLES (SAMPLE CONFIGURATOR)

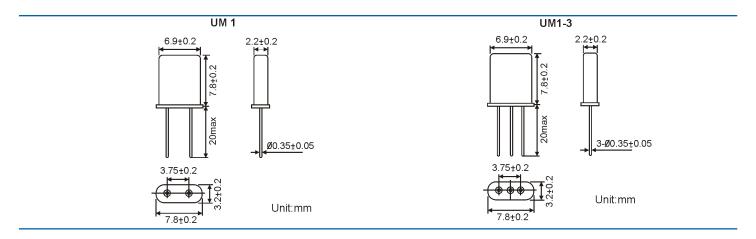
FREQUENCY STABILITY VS. TEMPERATURE

	±3ppm	±5ppm	±10ppm	±20ppm	±30ppm	±50ppm
0°/+50°C	+	+	+	+	+	+
-10°/+60°C	+	+	+	+	+	+
0°/+70°C		+	+	+	+	+
-20°/+70°C		+	+	+	+	+
-40°/+85°C			+	+	+	+
-40°/+125°C						+

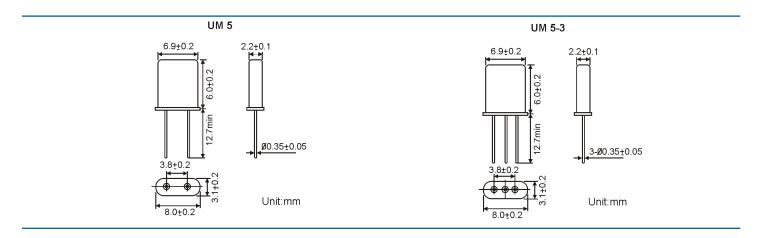




DIMENSIONS OF UM1/UM1-3



DIMENSIONS OF UM5/UM5-3



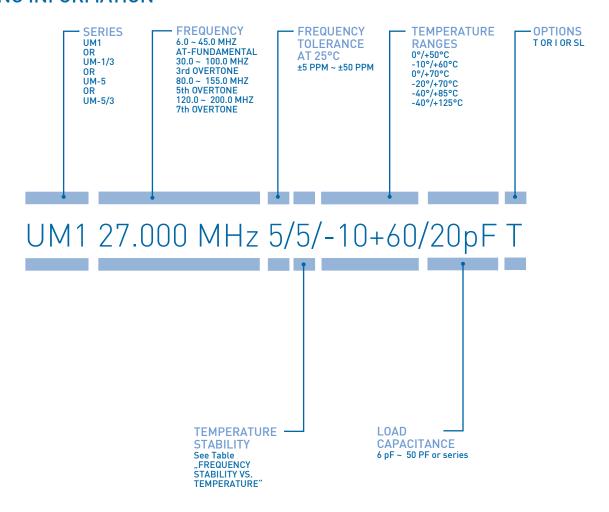
RESONANCE RESISTANCE

FREQUENCY IN MHZ	VIBRATION MODE	ESR MAX. IN Ω
6.0 ~ 45.0 MHz	AT Fund.	60 ~ 120
30.0 ~ 100.0 MHz	3rd Overtone	60 ~ 120
80.0 ~ 155.0 MHz	5th Overtone	60 ~ 120
120.0 ~ 200.0 MHz	7th Overtone	60 ~ 120

PETERMANN-TECHNIK GmbH Lechwiesenstr. 13 • D-86899 • Landsberg am Lech Tel: +49/8191/305395 • Fax: +49/8191/305397 info@petermann-technik.com • www.petermann-technik.com



ORDERING INFORMATION



EXAMPLE: UM1 27.000 MHz 5/5/-10+60/20pF/T PLEASE INDICATE YOUR REQUIRED PARAMETERS

OPTIONS FOR THT		
BLANK	= No options	
Т	= Tape and reel (only for 2 lead housing)	
1	= Insulator (for 2+3 lead housing)	
SL	= Short leads (only for 2 lead housing)	
REMARK: OPTIONS COMBINATIONS		
T+I	= can be combined	
I+SL	= can be combined	
SL	= can not be delivered in tape and in reel	



PETERMANN-TECHNIK GmbH Lechwiesenstr. 13 • D-86899 • Landsberg am Lech Tel: +49/8191/305395 • Fax: +49/8191/305397 info@petermann-technik.com • www.petermann-technik.com





PREMIUM QUALITY BY PETERMANN-TECHNIK



OUR COMPANY IS CERTIFIED ACCORDING TO ISO 9001:2008 IN OCTOBER 2013 BY THE DMSZ CERTIFIKATION GMBH.

THIS IS FOR YOU TO ENSURE THAT THE PRINCIPLES OF QUALITY MANAGEMENT ARE FULLY IMPLEMENTED IN OUR QUALITY MANAGEMENT SYSTEM AND QUALITY CONTROL METHODS ALSO DOMINATE OUR QUALITY STANDARDS.

© PETERMANN-TECHNIK GmbH 2015. The information contained herein is subject to change at any time without notice. PETERMANN-TECHNIK owns all rights, title and interest to the intellectual property related to PETERMANN-TECHNIK's products, including any software, firmware, copyright, patent, or trademark. The sale of PETERMANN-TECHNIK products does not convey or imply any license under patent or other rights. PETERMANN-TECHNIK retains the copyright and trademark rights in all documents, catalogs and plans supplied pursuant to or ancillary to the sale of products or services by PETERMANN-TECHNIK. Unless otherwise agreed to in writing by PETERMANN-TECHNIK, any reproduction, modification, translation, compilation, or representation of this material shall be strictly prohibited.