

SMD QUARTZ CRYSTAL

SERIES UM1/UM5-SMD CLIP

FEATURES

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



ROHS COMPLIANT

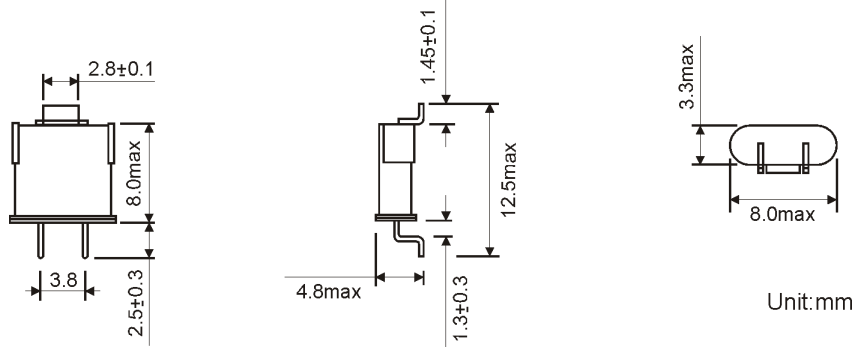
GENERAL DATA

PARAMETERS	PRODUCT FEATURES AND CONDITIONS
SMD-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
RESONANCE RESISTANCE	60 Ω Max. ~ 120 Ω Max.
LOAD CAPACITANCE (C _L)	6 pF ~ 50 pF or Series
WORKING TEMPERATURE RANGES	0/+50°C ~ -40/+125°C
SHUNT CAPACITANCE (C ₀)	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 M Ω DC/100V $\pm 10\%$
STORAGE TEMPERATURE	-55°/+125°C
DELIVERY FORM	Tape and Reel (1.000 pcs per reel)
SELECT YOUR REQUIRED CRYSTAL (PRODUCT CONFIGURATOR)	REQUEST CRYSTAL SAMPLES (SAMPLE CONFIGURATOR)

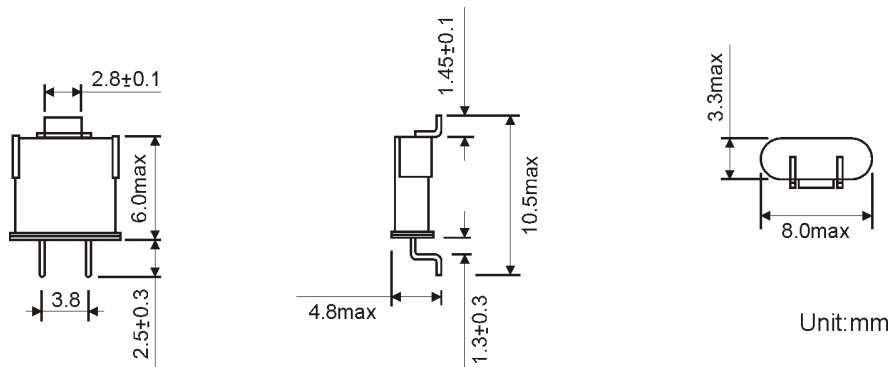
FREQUENCY STABILITY VS. TEMPERATURE

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

DIMENSIONS OF UM1-SMD-CLIP



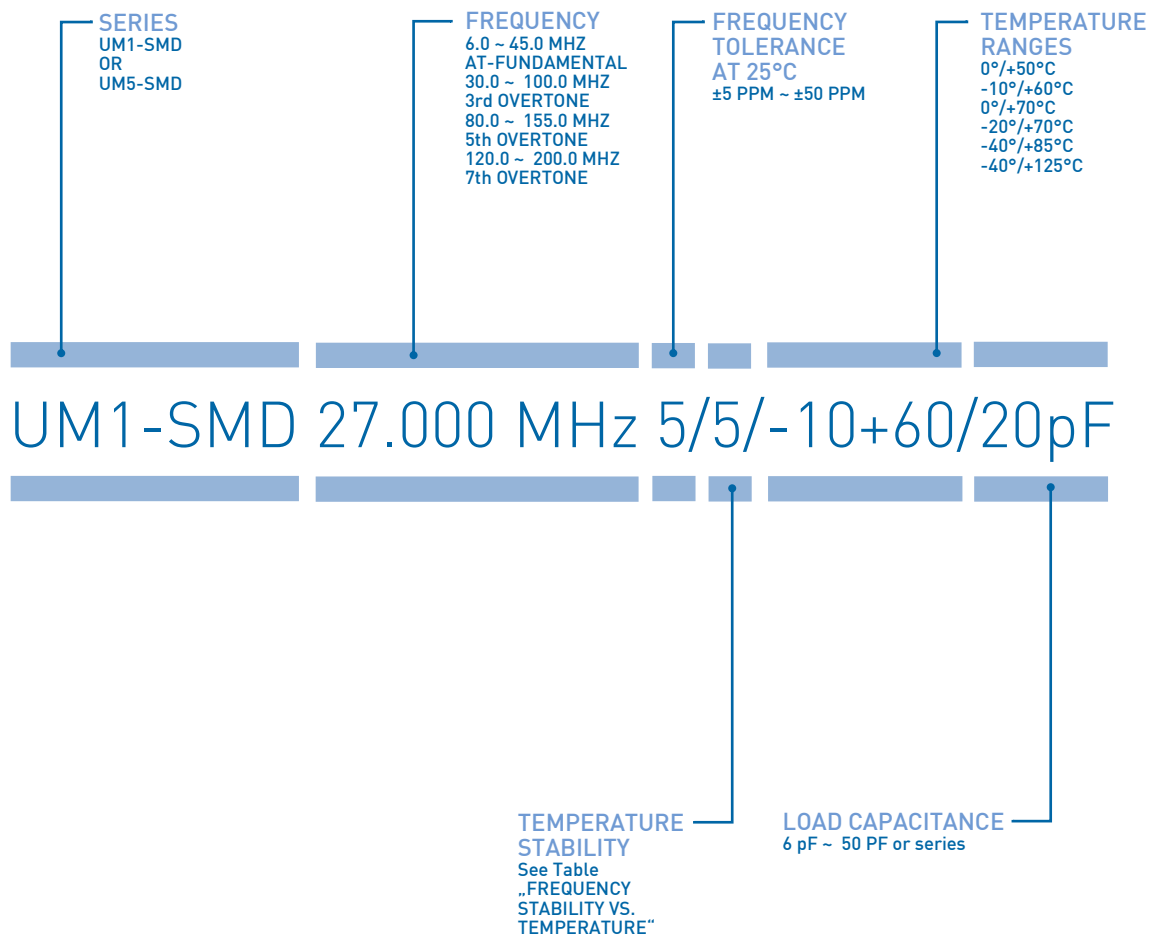
DIMENSIONS OF UM5-SMD-CLIP



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

ORDERING INFORMATION



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



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.