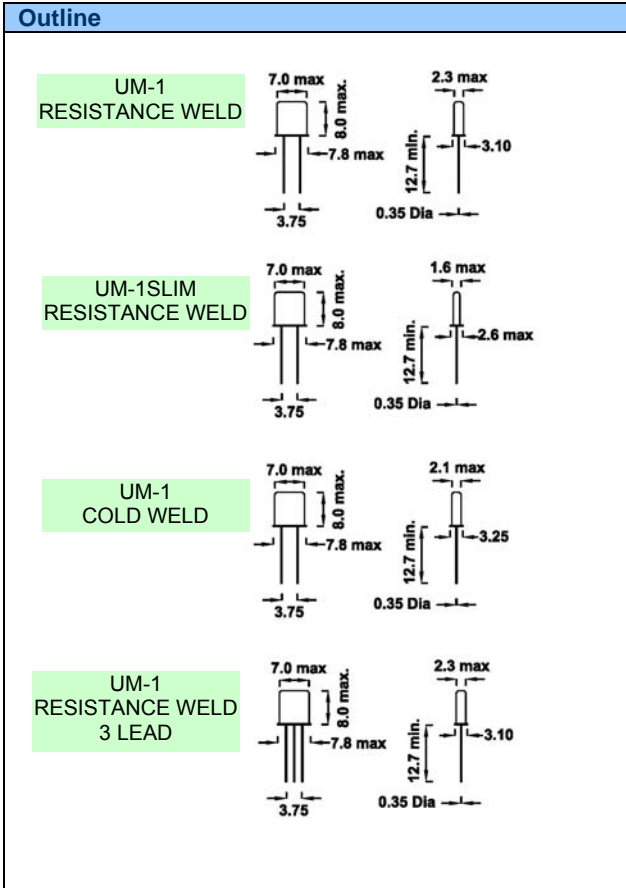




QUARTZ CRYSTAL –UM-1, UM-1 SLIM, UM-1 COLD WELD, UM-1 3 LEAD

FEATURE

- All metal welded package
- Wide frequency range from 7.5 MHz upto 170 MHz
- ROHS Compliant



▲ All dimensions are in mm.

Frequency Range	7.5 MHz to 170 MHz
Frequency Adjustment Tolerance at 25° C	Select from table below
Operating Temperature Range	Select from table below
Frequency Stability	Select from table below
ESR	Select from table below
Drive level	100 μ Watts Typical (or specify)
Shunt Capacitance C0	7.0 pF max.
Resonance Condition	XXS – series, XXP – Parallel with xx pF (for parallel please specify the xx value in pF)
Ageing	Resistance Weld: ±3 PPM / Year Cold Weld: ±1 PPM / Year

Operating Temperature Range	
Code	Range
A	0 to +50 °C
B	0 to +60 °C
F	0 to +70 °C
D	-10 to +60 °C
E	-10 to +70 °C
C	-20 to +70 °C
G	-30 to +80 °C
H	-30 to +85 °C
I	-40 to +85 °C
J	-40 to +90 °C
K	-55 to +105 °C
L	-55 to +125 °C

Frequency Adjustment Tolerance at 25°C/Stability Over OTR	
Code	Stability
R	±3 PPM
B	±5 PPM
C	±7.5 PPM
D	±10 PPM
E	±15 PPM
F	±20 PPM
G	±25 PPM
H	±30 PPM
M	±50 PPM
K	±100 PPM

Frequency Range By Mode Of Oscillation		
Fundamental	3rd Overtone	5th Overtone
7.5 to 41.0 MHz	20 to 85 MHz	60 to 170 MHz

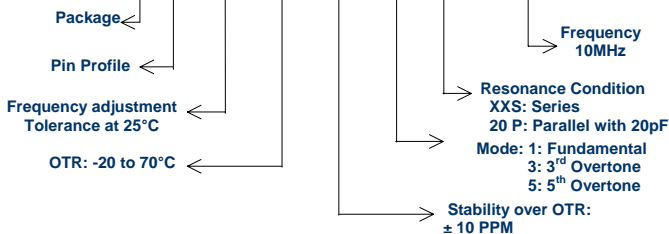
Max Equivalent Series Resistance Table			
Frequency Range MHz	ESR	Frequency Range MHz	ESR
Fundamental		3rd Overtone	
7.5 to ≤10.0	50 Ω	20.0 to ≤30.0	45 Ω
10.0 to ≤13.0	40 Ω	30.0 to ≤85.0	30 Ω
13.0 to ≤18.0	25 Ω	5th Overtone	
18.0 to ≤25.0	20 Ω	60.0 to ≤100.0	70 Ω
25.0 to ≤41.0	15 Ω	100.0 to ≤140.0	80 Ω
		140.0 to ≤170.0	100 Ω

Pin Profile	Code
2 Pin Straight	2
3 Pin Straight	3

Ordering Information

Example

UM1 2 F C D 1 20 P 010M000000



Specifications subject to change without notice
Revision No. 12a of December 2007

ANDHRA ELECTRONICS LIMITED

34 & 35, IDA, Kakinada, AP – 533 005,
INDIA.
URL: www.andhraelec.com

Phone: +91-884-2342203
Fax: +91-884-2341145
E-mail: info@andhraelec.com