



MATERIAL DIELECTRIC SELECTION

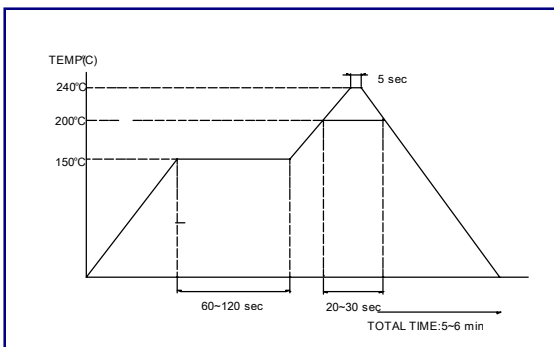
Dielectric	Temperature Coefficient (ppm/°C)	Recommended Frequency (MHz)
21	< ± 10	700 to 5000
37	< ± 10	600 to 3500
80	< ± 10	300 to 2000
90	< ± 10	300 to 2000

APPLICATIONS

- Dielectric resonating oscillator (DRO)
- Voltage controlled oscillators (VCO)
- Wireless handset
- Pagers
- Global position systems (GPS)
- Bandpass filters and duplexers
- Narrowband filters
- Wireless communications

FEATURES

- Sizes available from 2 mm to 12 mm
- Four dielectric constants: 21, 37, 80, and 90
- Low temperature coefficient
- High quality factor (Q)
- Wide range of resonant frequency
- Frequency tolerance: 0.5% to 1.0%
- Low loss silver plate
- Tabs and tabless configurations available



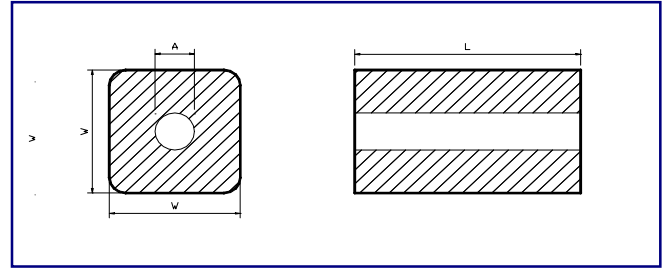
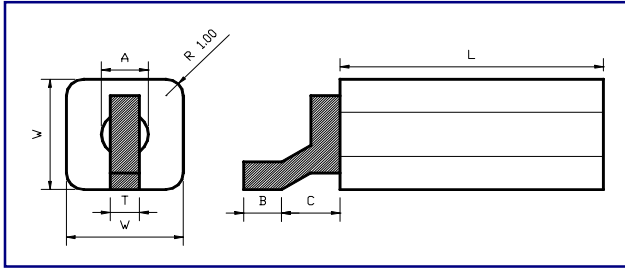
MCV Technologies, Inc., a volume supplier of microwave microelectronics and components, utilizes a 45,000 square foot manufacturing facility to provide its customers with technically advanced, high quality products at competitive prices. Our facilities have been ISO 9001, ISO 9002, and ISO 14001 certified.

Coaxial TEM mode resonators are designed to provide compact size, high quality factor (Q), temperature stability and low cost. These resonators are applied in two forms: Quarter Wavelength (which has one end surface metallized); and Half Wavelength (which has both end surfaces metallized).

MCV offers seven sizes and four dielectric materials to meet your application requirements from 300 MHz to 5 GHz range. By using high performance dielectric materials, metallized with thick film silver plate, these products provide high quality factor (Q) and rugged design. MCV's line of tab and tabless configurations have excellent solderability and solder leach resistance to the circuit board for surface mounting.

- **LOW COST**
- **HIGH PERFORMANCE**
- **FAST TURNAROUND**
- **TECHNICAL SUPPORT**

DIMENSION TYPES



Type	W	A	B	C	T
D20	2.1 ± 0.1	0.65 ± 0.10	0.5	1.0	0.5
D30	3.0 ± 0.1	0.95 ± 0.10	0.7	1.3	0.5
D40	4.0 ± 0.1	2.00 ± 0.10	0.8	1.3	0.5
		1.50 ± 0.10	0.8	1.3	0.5
		1.20 ± 0.10	tabless		
D60	6.0 ± 0.1	2.50 ± 0.10	tabless		
		2.40 ± 0.10	1.2	1.8	0.5
		2.20 ± 0.10	1.2	1.8	0.5
		2.00 ± 0.10	1.2	1.8	0.5
D80	8.0 ± 0.2	2.70 ± 0.20	1.5	1.8	0.7
D100	10.0 ± 0.2	3.30 ± 0.20	1.5	2.0	1.0
D120	12.0 ± 0.2	4.00 ± 0.20	tabless		
		3.55 ± 0.20	2.0	2.5	1.0

- Unit in mm
- Custom size and configuration available upon request

ORDERING INFORMATION

MR	90	D120	8	4	1000	N
MCV Resonator	Material Dielectric	Dimension	Impedance	Resonant Wave Length	Frequency	Tab
	21	D20 = 2 mm	Unit in Ohm	2 = λ/2	Unit in MHz	N = Tabless
	37	D30 = 3 mm		4 = λ/4		T = Tab
	80	D40 = 4 mm				
	90	D60 = 6 mm				
		D80 = 8 mm				
		D100 = 10 mm				
		D120 = 12 mm				



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