

Dielectric Resonators (RESOMICS®)

TE₀₁₈ Mode Resonators



DRD Type



DRT Type

● Available Range by Every Material

Material	ϵ_r	Q min at Measured Freq.	Available Range of τf (ppm/°C)	τf Tolerance (ppm/°C)	Available Range of Freq. (GHz)
F Series	24	30,000 (10GHz)	0 to +4	$\pm 2, \pm 1$	10.0 to 25.1
E Series	24	20,000 (10GHz)	0 to +6	$\pm 2, \pm 1$	8.4 to 25.1
B Series	28	15,000 (10GHz)	0 to +6	$\pm 2, \pm 1, \pm 0.5$	4.8 to 25.9
R Series	30	12,000 (10GHz)	0 to +6	$\pm 2, \pm 1, \pm 0.5$	4.6 to 24.2
V Series	34	10,000 (10GHz)	0 to +8	$\pm 2, \pm 1, \pm 0.5$	2.9 to 13.2
M Series	38	7,000 (7GHz)	0 to +6	$\pm 2, \pm 1, \pm 0.5$	1.5 to 12.4
U Series	38	6,000 (7GHz)	-4 to +10	$\pm 2, \pm 1, \pm 0.5$	1.5 to 12.4
K Series	92	1,500 (3GHz)	+3	± 3	0.6 to 3.0

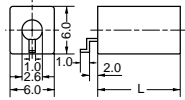
TE mode resonator with support and frequency-adjusted resonators are available.

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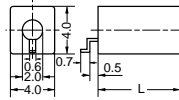
TEM Mode Resonators



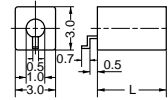
DRR060 Type
Copper



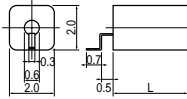
DRR040 Type
Copper



DRR030 Type
Copper



DRR020 Type
Copper



L : Depends on frequency.
in mm

● Available Range of TEM Mode Resonators

Electrode	Material	ϵ_r	τf^1 (ppm/°C)	Type	Characteristic Impedance	Resonant Wave Length	Frequency Range ²⁾ (MHz)	Qu min ³⁾			
Copper	P	21.4±0.2	4±2	DRR060	6Ω	λ/4	1,000 to 1,190	550			
							1,200 to 1,790	600			
							1,800 to 2,700	650			
						λ/2	2,000 to 2,490	800			
							2,500 to 3,000	850			
							DRR040	10Ω	λ/4	1,300 to 1,490	350
				1,500 to 1,990	400						
				2,000 to 3,000	450						
				λ/2	2,500 to 3,000	550					
					DRR030	15Ω			λ/4	1,900 to 2,490	380
										2,500 to 3,000	400
				DRR020	15Ω	λ/4	2,800 to 3,500	250			
	3,510 to 5,000	300									
	K	DRR060	92±1	3±2	6Ω	λ/4	440 to 490	330			
							500 to 790	350			
							800 to 1,300	400			
							λ/2	1,000 to 1,690	470		
								1,700 to 2,200	510		
								DRR040	5Ω	λ/4	500 to 540
		550 to 640	220								
		650 to 790	240								
		800 to 890	260								
		900 to 1,490	270								
		1,500 to 1,800	290								
λ/2		1,000 to 1,390	300								
	1,400 to 1,890	340									
	1,900 to 3,000	370									
	DRR030	7Ω	λ/4	900 to 1,490	230						
				1,500 to 1,600	250						
	DRR020	8Ω	λ/4	900 to 1,590	150						
1,600 to 2,600				190							
Silver	U	38±1	3±2	DRR060	8Ω	λ/4	680 to 1,540	450			
							1,550 to 1,800	550			
						λ/2	1,600 to 2,390	700			
							2,400 to 3,500	800			
				DRR040	7Ω	λ/4	1,000 to 1,990	360			
							2,000 to 2,700	400			
						λ/2	2,000 to 2,990	480			
							3,000 to 4,800	520			

1) Frequency temperature coefficient.

2) Tolerance of resonant frequency (P : ±0.7%, U : ±0.5%, K : ±0.7%).

3) Qu value depends on lower limit of frequency range.

Minimum Quantity (order in sets only) : DRR020KE 2,500 pcs./reel

DRR030KE 2,000 pcs./reel

DRR040KE 1,500 pcs./reel