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CS Ceramic Substrate

Type: CS

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1 Features

- ◆ Dielectric material includes type 1 ceramic and type 2 ceramic; Dielectric constant range: 10~16000.
- ◆ Low Dissipation factor, high temperature stability, flatness and surface finish.



2 Applications

Customized single Layer capacitors ;
R/F microwave circuits with high requirements for the case sizes and working frequency.

3 How to order

CS	3915C	2X1	212
Type	Case size code	TCC	Dielectric constant
CS: Ceramic substrate	①	②	③

4 Dimensions

①Case size code			Surface roughness
The 1st and 2nd digit: length and width code of substrates	The 3rd and 4th digit: thickness code of substrates	The 5th digit :the thickness tolerance code of substrates	Ra ≤ 0.7μm
25: L*W=(25*25)mm, ±1mm	For example: 15 refers to T=0.15mm Available codes: 07、08、09、11、12、14、16、18、20、23、27、30 Note: other thicknesses are customizable	C: ±0.005mm	
39: L*W=(39*39)mm, ±1mm		D: 0~+0.010mm	
50: L*W=(50*50)mm, ±1mm		Z: other thicknesses	

5 Electrical Specifications

Material	② Temperature Coefficient Code	③ Dielectric constant	Temperature Coefficient	Operating Temperature	Dissipation factor @1MHz	Insulation Resistance 25℃
Type 1 Ceramic	AG	10	(+100 ± 30) ppm/℃	-55℃ ~ 125℃	≤ 0.0015	≥ 10 ⁵ MΩ
	AG	12	(+100 ± 30) ppm/℃	-55℃ ~ 125℃	≤ 0.0015	
	CG	19	(0 ± 30) ppm/℃	-55℃ ~ 125℃	≤ 0.0070	
	CG	35	(0 ± 30) ppm/℃	-55℃ ~ 125℃	≤ 0.0070	
	CG	80	(0 ± 30) ppm/℃	-55℃ ~ 125℃	≤ 0.0070	
	UK	130	(-750 ± 250) ppm/℃	-55℃ ~ 125℃	≤ 0.0025	≥ 10 ⁵ MΩ
	VL	255	(-1500 ± 500) ppm/℃	-55℃ ~ 125℃	≤ 0.0025	
	VL	290	(-1500 ± 500) ppm/℃	-55℃ ~ 125℃	≤ 0.0025	
	KL	440	(-2200 ± 500) ppm/℃	-55℃ ~ 125℃	≤ 0.0025	
	DM	600	(-2200 ± 500) ppm/℃	-55℃ ~ 125℃	≤ 0.0025	
Type 2 Ceramic	2X1	1000	± 15%	-55℃ ~ 125℃	≤ 0.0400	≥ 10 ⁵ MΩ
	2X1	2100	± 15%	-55℃ ~ 125℃	≤ 0.0400	
	2X1	3100	± 15%	-55℃ ~ 125℃	≤ 0.0400	
	2X1	4200	± 15%	-55℃ ~ 125℃	≤ 0.0400	
	2F2	10000	(+30 ~ -80)%	-55℃ ~ 85℃	≤ 0.0400	
	2F4	16000	(+30 ~ -80)%	-25℃ ~ 85℃	≤ 0.0400	

6 Storage

Storage environmental temperature :-10℃ ~ 40℃, relative humidity: ≤80%, No acid, alkaline or other harmful gases in the warehouse.