MULTILAYER CERAMIC CHIP CAPACITOR

FEATURES

Capacitance: 0.5pF ~330μF
Voltage: 4V~200V
Size:0201~2225
Lead-free terminations, RoHS and REACH Compliant

APPLICATIONS

Typical applications include critical timing, tuning, circuits requiring low loss, circuits with pulse, high current, decoupling, bypass,filtering, transient voltage suppression, blocking and energy storage.

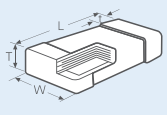
ORDERING INFORMATION

CC41	—	0805	—	CG	—	50V	—	100pF	—	J	—	(N)
Series		Case Size		Dielectric		Rated Voltage		Capacitance		Capacitance Tolerance		Termination Finish
CC41-class Ⅰ		0201 0402 0603 0805 1206 1210 1812 2220 2225		CG		4V 6.3V 10V 16V 25V 35V 50V 100V 200V		Refer to Capacitance		＜10pF C=±0.25pF D=±0.50pF ≥10pF J=±5%		N=100%Sn
CT41G-class Ⅱ				2X1 X5R						K=±10% M=±20%		

Note：2X1=X7R

DIMENSIONS

Unit:mm

Appearance	Case Size	0201	0402	0603	0805	1206	1210	1812	2220	2225
	L	0.60 ± 0.10	1.00 ± 0.20	1.60 ± 0.20	2.00 ± 0.30	3.20 ± 0.30	3.20 ± 0.40	4.50 ± 0.40	5.70 ± 0.50	5.70 ± 0.50
	W	0.30 ± 0.10	0.50 ± 0.20	0.80 ± 0.20	1.25 ± 0.20	1.60 ± 0.30	2.50 ± 0.30	3.20 ± 0.30	5.00 ± 0.50	6.50 ± 0.60
	Tmax	0.55	0.70	1.00	1.45	1.90	2.80	3.50	4.20	4.20
	t	0.15 ± 0.05	0.25 ± 0.10	0.35 ± 0.25	0.50 ± 0.25	0.50 ± 0.35	0.60 ± 0.30	0.90 ± 0.60	0.90 ± 0.60	0.90 ± 0.60

ELECTRICAL CHARACTERISTICS

No.	Item		Specification Limits	Measuring Conditions
1	Capacitance		Within specified tolerance	CG: $C_R \leqslant 1000pF$ 1MHz±10% 0.5V~5V $C_R > 1000pF$ 1kHz±10% 1V±0.2V 2X1 & X5R: $C_R \leqslant 10\mu F$ 1kHz±10% 1V±0.2V $C_R > 10\mu F$ 120Hz±10% 0.5V±0.2V
2	Dissipation Factor	CG	$C_R \leqslant 30pF$ $tg\delta \leqslant \frac{1}{(400+20C_R)}$ $C_R > 30pF$ $tg\delta \leqslant 10\times10^{-4}$	
		2X1 X5R	$4V \leqslant U_R < 16V$ $tg\delta \leqslant 1000\times10^{-4}$ $16V \leqslant U_R < 25V$ $tg\delta \leqslant 700\times10^{-4}$ $25V \leqslant U_R < 50V$ $tg\delta \leqslant 500\times10^{-4}$ $U_R \geqslant 50V$ $tg\delta \leqslant 350\times10^{-4}$ ※Note: $C_R \geqslant 1\mu F$ $tg\delta \leqslant 10\%$; Size 0201,0402,0603 $tg\delta \leqslant 10\%$;	
3	Insulation Resistance		10000MΩ or 100MΩ·μF whichever is less	Voltage shall be applied with follow conditions: $U_R \leqslant 500V$ U_R $U_R > 500V$ 500V Voltage applying time shall be 60±5 seconds. Charging and discharging current shall be 50mA or less.
4	Dielectric Strength		No breakdown or visual defects	$U_R \leqslant 100V$ $2.5U_R$ $100V < U_R \leqslant 200V$ $1.5U_R+100V$ 5 seconds,charging and discharging current shall be 50mA or less.

CAPACITANCE AND RATED VOLTAGE RANGE

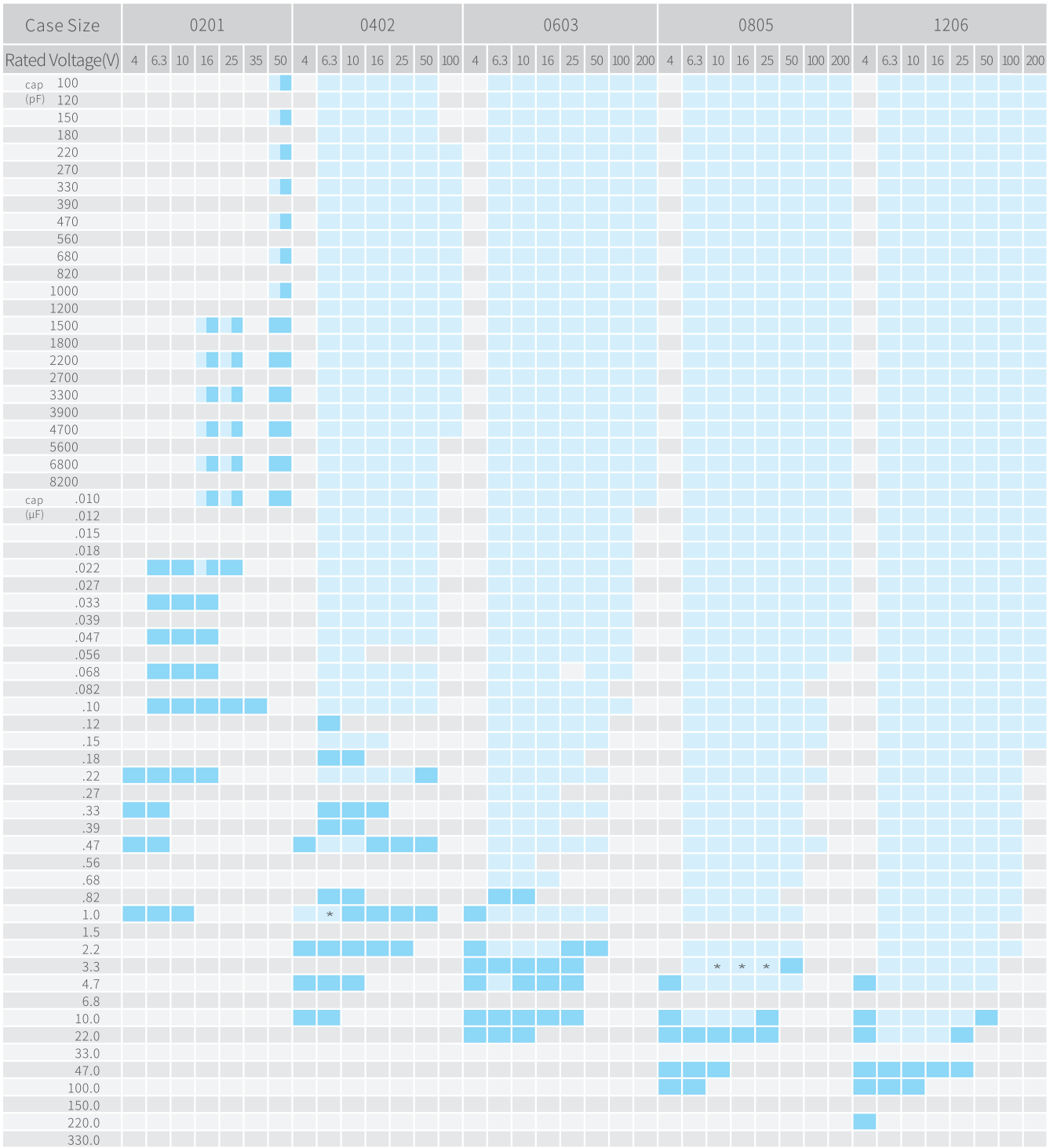
CC41

Case Size	0201	0402		0603			0805			1206			1210			1812			2220				2225			
Rated Voltage(V)	50	25	50	50	100	200	50	100	200	50	100	200	50	100	200	50	100	200	25	50	100	200	25	50	100	200
cap (pF) 0.5 1.0																										
1.2 1.5																										
1.8 2.2																										
2.7 3.3																										
3.9 4.7																										
5.6 6.8																										
8.2																										
10																										
12																										
15																										
18																										
22																										
27																										
33																										
39																										
47																										
56																										
68																										
82																										
100																										
120																										
150																										
180																										
220																										
270																										
330																										
390																										
470																										
560																										
680																										
820																										
1000																										
1200																										
1500																										
1800																										
2200																										
2700																										
3300																										
3900																										
4700																										
5600																										
6800																										
8200																										
cap (μF) .010																										
.012																										
.015																										
.018																										
.022																										
.027																										
.033																										
.039																										
.047																										
.056																										
.068																										
.082																										
0.10																										
0.12																										
0.15																										
0.18																										
0.22																										
0.27																										
0.33																										
0.39																										
0.47																										

CG

CAPACITANCE AND RATED VOLTAGE RANGE

CT41G



*DF(MAX)=12.5%

CAPACITANCE AND RATED VOLTAGE RANGE

CT41G

Case Size		1210								1812							2220				2225		
Rated Voltage(V)		4	6.3	10	16	25	50	100	200	6.3	10	16	25	50	100	200	16	25	50	100	50	100	200
cap (pF)	100																						
	120																						
	150																						
	180																						
	220																						
	270																						
	330																						
	390																						
	470																						
	560																						
	680																						
	820																						
	1000																						
	1200																						
	1500																						
	1800																						
	2200																						
	2700																						
	3300																						
	3900																						
	4700																						
	5600																						
	6800																						
	8200																						
cap (μF)	.010																						
	.012																						
	.015																						
	.018																						
	.022																						
	.027																						
	.033																						
	.039																						
	.047																						
	.056																						
	.068																						
	.082																						
	.10																						
	.12																						
	.15																						
	.18																						
	.22																						
	.27																						
	.33																						
	.39																						
	.47																						
	.56																						
	.68																						
	.82																						
	1.0																						
	1.5																						
	2.2																						
	3.3																						
	4.7																						
	6.8																						
	10.0																						
	22.0																						
	33.0																						
	47.0																						
	100.0																						
	150.0																						
	220.0																						
	330.0																						

2X1
X5R