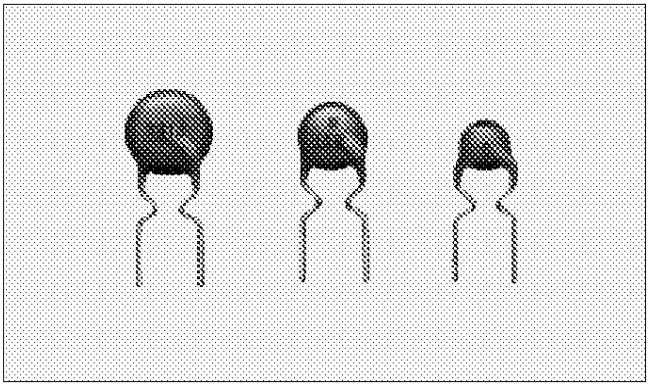
CERAMIC CAPACITORS

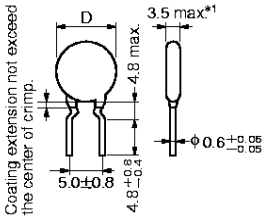
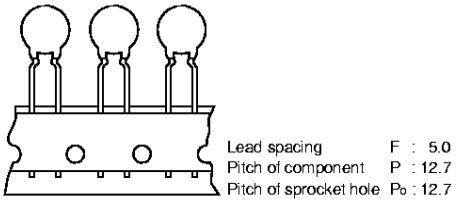
50V Ceramic Capacitors DD100 Series

■FEATURES

1. High reliability and low cost.
2. Little residual inductance. Can be used in the high frequencies.
3. Temperature compensating type with high Q and stable against temperature changes.
4. 50V-capacitors are designed to be suitable for 63V-applications.



■DIMENSIONS

Packaging form	Bulk	Taping*2
Configuration	Inside Crimp	Inside Crimp
Lead code	-63	-989, -999, -959
Dimensions (in mm)		

*1 4.0 max. in the case of temperature compensating type of 22pF and under, and high dielectric constant type of 470pF and under.
*2 Please see page 16 on other taping specification.

■MARKING

Item \ Type / Temp. Char.	Temperature Compensating Type		High Dielectric Constant Type	
	CK, CJ, CH	SL	B	F
DD104–DD106	12	12	B 102	472
DD107 & DD108	121J	331J	B 332K	223Z M 67
DD109–DD112	271J M 67	561J M 67	B 682K M 67	473Z M 67
Temperature Characteristics	Identified by color (Black).	Omitted.	Identified by code.	Omitted.
Nominal Capacitance	Under 100pF : Actual value. 100pF and over : Identified by 3-figure code.			
Capacitance Tolerance	Identified by code. Omitted for Nom. Dia. ϕ6mm and under except F103Z.			
Rated Voltage	Identified by horizontal line under capacitance.			
Manufacturer's Identification	Identified by M. Omitted for Nom. Dia. ϕ8mm and under except F223Z.			
Manufactured Date	Abbreviation. Omitted for Nom. Dia. ϕ8mm and under except F223Z.			

■STANDARD LIST

Temperature Compensating Type	DD100 Series

CK Characteristics (0±250ppm/℃)
CJ Characteristics (0±120ppm/℃)
CH Characteristics (0± 60ppm/℃)

Nominal Capacitance (pF)	Body Dia. D (mm max.)	Capacitance Tolerance	DC Rated Voltage (V)	Part Number (⊓ : means optional lead code shown on the right.)	Lead Code	
					Bulk	Taping
					Inside Crimp 	Crimp 
1	4	±0.25pF	50	DD104⊓CK 010 C 50	–63	–989
1.5				DD104⊓CK 1R5 C 50		
2				DD104⊓CK 020 C 50		
3				DD104⊓CJ 030 C 50		
4				DD104⊓CH 040 C 50		
5				DD104⊓CH 050 C 50		
6		±0.5pF		DD104⊓CH 060 D 50		
7				DD104⊓CH 070 D 50		
8				DD104⊓CH 080 D 50		
9				DD104⊓CH 090 D 50		
10				DD104⊓CH 100 D 50		
12		±5%		DD104⊓CH 120 J 50		
15				DD104⊓CH 150 J 50		
18				DD104⊓CH 180 J 50		
22				DD104⊓CH 220 J 50		
27				DD104⊓CH 270 J 50		
33				DD104⊓CH 330 J 50		
39				DD104⊓CH 390 J 50		
47				DD104⊓CH 470 J 50		
56	5			DD105⊓CH 560 J 50		
68	6			DD106⊓CH 680 J 50		–999
82				DD106⊓CH 820 J 50		
100	7.5			DD107⊓CH 101 J 50		–959
120				DD107⊓CH 121 J 50		
150	8			DD108⊓CH 151 J 50		
180	9.5			DD109⊓CH 181 J 50		
220				DD109⊓CH 221 J 50		
270	10.5			DD110⊓CH 271 J 50		

Temperature Compensating Type	DD100 Series

SL Characteristics (+350 to −1000ppm/℃)

Nominal Capacitance (pF)	Body Dia. D (mm max.)	Capacitance Tolerance	DC Rated Voltage (V)	Part Number (⊓: means optional lead code shown on the right.)	Lead Code	
					Bulk	Taping
					Inside Crimp 	Crimp 
1	4	±0.25pF	50	DD104⊓SL 010 C 50	−63	−989
1.5				DD104⊓SL 1R5 C 50		
2				DD104⊓SL 020 C 50		
3				DD104⊓SL 030 C 50		
4				DD104⊓SL 040 C 50		
5				DD104⊓SL 050 C 50		
6		±0.5pF		DD104⊓SL 060 D 50		
7				DD104⊓SL 070 D 50		
8				DD104⊓SL 080 D 50		
9				DD104⊓SL 090 D 50		
10				DD104⊓SL 100 D 50		
12		±5%		DD104⊓SL 120 J 50		
15				DD104⊓SL 150 J 50		
18				DD104⊓SL 180 J 50		
22				DD104⊓SL 220 J 50		
27				DD104⊓SL 270 J 50		
33				DD104⊓SL 330 J 50		
39				DD104⊓SL 390 J 50		
47				DD104⊓SL 470 J 50		
56				DD104⊓SL 560 J 50		
68				DD104⊓SL 680 J 50		
82				DD104⊓SL 820 J 50		
100				DD104⊓SL 101 J 50		
120				DD104⊓SL 121 J 50		
150	5			DD105⊓SL 151 J 50		
180	6			DD106⊓SL 181 J 50		−999
220				DD106⊓SL 221 J 50		
270	7.5			DD107⊓SL 271 J 50		−959
330				DD107⊓SL 331 J 50		
390				DD107⊓SL 391 J 50		
470	8			DD108⊓SL 471 J 50		
560	9.5			DD109⊓SL 561 J 50		
680	10.5			DD110⊓SL 681 J 50		
820				DD110⊓SL 821 J 50		
1000	12.5			DD112⊓SL 102 J 50		—

High Dielectric Constant Type	DD100 Series

B Characteristics (±10%)

Nominal Capacitance (pF)	Body Dia. D (mm max.)	Capacitance Tolerance (%)	DC Rated Voltage (V)	Part Number (□ : means optional lead code shown on the right.)	Lead Code	
					Bulk	Taping
					Inside Crimp 	Crimp 
100	4	±10	50	DD104□B 101 K 50	–63	–989
120				DD104□B 121 K 50		
150				DD104□B 151 K 50		
180				DD104□B 181 K 50		
220				DD104□B 221 K 50		
270				DD104□B 271 K 50		
330				DD104□B 331 K 50		
390				DD104□B 391 K 50		
470				DD104□B 471 K 50		
560				DD104□B 561 K 50		
680				DD104□B 681 K 50		
820				DD104□B 821 K 50		
1000				DD104□B 102 K 50		
1200				DD104□B 122 K 50		
1500				DD104□B 152 K 50		
1800	5			DD105□B 182 K 50		
2200	6			DD106□B 222 K 50		–999
2700				DD106□B 272 K 50		
3300	7.5			DD107□B 332 K 50		–959
3900				DD107□B 392 K 50		
4700				DD107□B 472 K 50		
5600	8			DD108□B 562 K 50		
6800	9.5			DD109□B 682 K 50		
8200	10.5			DD110□B 822 K 50		
10000	11			DD111□B 103 K 50		

F Characteristics ($^{+30}_{-80}$%)

Nominal Capacitance (pF)	Body Dia. D (mm max.)	Capacitance Tolerance (%)	DC Rated Voltage (V)	Part Number (□ : means optional lead code shown on the right.)	Lead Code	
					Bulk	Taping
					Inside Crimp 	Crimp 
2200	4	$^{+80}_{-20}$	50	DD104□F 222 Z 50	–63	–989
4700				DD104□F 472 Z 50		
6800	5			DD105□F 682 Z 50		
10000	6			DD106□F 103 Z 50		–999
22000	8			DD108□F 223 Z 50		–959
47000	10.5			DD110□F 473 Z 50		