

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

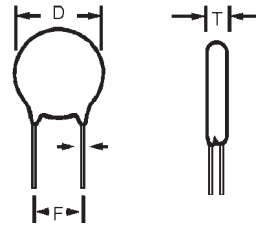
# Disc Ceramic Capacitors



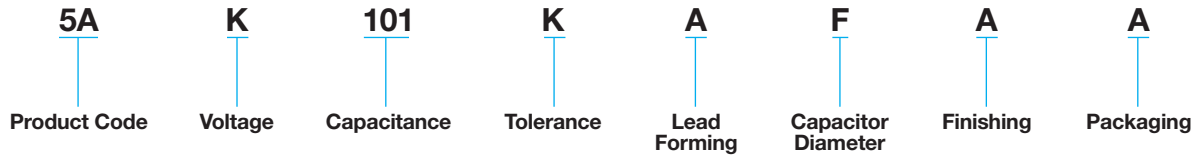
## General Specifications - Class I Temperature Compensating

### DIELECTRIC - CLASS I

These ceramic capacitors have linear temperature coefficient, very low tolerances, low losses, high insulation resistance and are specially suitable for tuned circuits, timing and other precision circuits. Meets IEC 384-8 (1988).



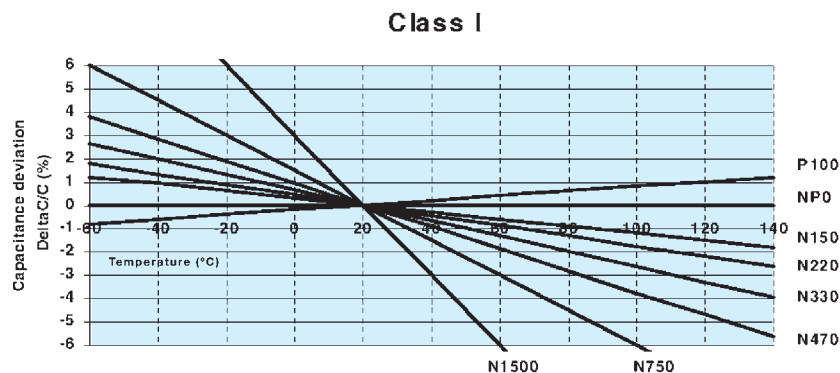
### HOW TO ORDER



### PERFORMANCE CHARACTERISTICS

Voltage Rating	100 V → 500 V	1kV → 5kV
Measured at	1.0 MHz @ 1.0 Vrms / 25°C	1.0 MHz @ 1.0 Vrms / 25°C
Dissipation Factor (%)	$C_R \leq 30 \text{ pF} \rightarrow \leq 1/C_R + 0.07$ $C_R > 30 \text{ pF} \rightarrow \leq 0.1\%$	$C_R \leq 30 \text{ pF} \rightarrow \leq 1/C_R + 0.07$ $C_R > 30 \text{ pF} \rightarrow \leq 0.1\%$
Tolerance	$C_R < 10 \text{ pF} \rightarrow \pm 0.25 \text{ pF}, \pm 0.5 \text{ pF}$ $C_R \geq 10 \text{ pF} \rightarrow \pm 5\%, \pm 10\%$	$C_R < 10 \text{ pF} \rightarrow \pm 0.25 \text{ pF}, \pm 0.5 \text{ pF}$ $C_R \geq 10 \text{ pF} \rightarrow \pm 5\%, \pm 10\%$
Insulation Resistance (IR)	@ $V_R \geq 10 \text{ G}\Omega$	@ $500V \geq 10 \text{ G}\Omega$
Dielectric Strength NOTE: Charging current limited to 50 mA	@ $V_R = 100V \rightarrow V_t = 250V \text{ (DC)}$ @ $V_R = 500V \rightarrow V_t = 1250V \text{ (DC)}$	$1.5 \times V_R + 500 \text{ (DC)}$
Operating Temperature Range (°C)	-30 → +85°C	-30 → +85°C -30 → +125°C
Climatic Category	30 / 85 / 21 Phenolic Coated	30 / 085 / 21 Phenolic Coated 30 / 085 / 56 Epoxy Coated

### TEMPERATURE COEFFICIENT – TYPICAL CURVES



# Disc Ceramic Capacitors



## Dimension Table - Class I Temperature Compensating

### CLASS I - CAPACITANCE VS. DISC DIAMETER

millimeters (inches)

Temp. Coefficient	NPO					
Digits 1, 2, 3 of P.N.	5AK	5AQ	5AR	5AS	5AT	5AU
Rated Voltage (V <sub>R</sub> )	100 VDC	500 VDC	1000 VDC 130 VAC	2000 VDC 250 VAC	3000 VDC 380 VAC	4000 VDC 440 VAC
C <sub>R</sub> (pF)						
1.0	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)
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	6.0 (0.236)	8.0 (0.315)	8.0 (0.315)	9.0 (0.354)	11.0 (0.433)	
39						
47	7.0 (0.276)	8.0 (0.315)	9.0 (0.354)	11.0 (0.433)	12.0 (0.472)	
56						
68	8.0 (0.315)	9.0 (0.354)	10.0 (0.394)	11.0 (0.433)	12.0 (0.472)	
82						
100	9.0 (0.354)	11.0 (0.433)	12.0 (0.472)	14.0 (0.551)	14.0 (0.551)	
120						
150	11.0 (0.433)	12.0 (0.472)	14.0 (0.551)	16.0 (0.630)	16.0 (0.630)	
180						
220	12.0 (0.472)	14.0 (0.551)	16.0 (0.630)	16.0 (0.630)	16.0 (0.630)	
270						
330						
390						

# Disc Ceramic Capacitors



## Dimension Table - Class I Temperature Compensating

### CLASS I - CAPACITANCE VS. DISC DIAMETER

millimeters (inches)

Temp. Coefficient Digits 1, 2, 3 of P.N.	N750							N1500	
	5GK	5GQ	5GR	5GS	5GT	5GU	5GW	5HK	5HQ
Rated Voltage (V <sub>R</sub> )	100 VDC	500 VDC	1000 VDC 130 VAC	2000 VDC 250 VAC	3000 VDC 380 VAC	4000 VDC 440 VAC	5000 VDC 550 VAC	100 VDC	500 VDC
C <sub>R</sub> (pF)									
1.5	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	5.0 (0.197)	6.0 (0.236)	6.0 (0.236)	5.0 (0.197)	5.0 (0.197)
1.8									
2.2									
2.7									
3.3									
3.9									
4.7									
5.6									
6.8									
8.2									
9.0									
10									
12									
15									
18									
22									
27									
33									
39									
47									
56									
68									
82									
100									
120									
150									
180									
220									
270									
330									
7.0 (0.276)	8.0 (0.315)	9.0 (0.354)	9.0 (0.354)	10.0 (0.394)	11.0 (0.433)	12.0 (0.472)	12.0 (0.472)	7.0 (0.276)	7.0 (0.276)
8.0 (0.315)	9.0 (0.354)	10.0 (0.394)	11.0 (0.433)	14.0 (0.551)	14.0 (0.551)	14.0 (0.551)	14.0 (0.551)	8.0 (0.315)	8.0 (0.315)
10.0 (0.394)	11.0 (0.433)	12.0 (0.472)	12.0 (0.472)	14.0 (0.551)	16.0 (0.630)			9.0 (0.354)	9.0 (0.354)
11.0 (0.433)	14.0 (0.551)	14.0 (0.551)	14.0 (0.551)	16.0 (0.630)				10.0 (0.394)	11.0 (0.433)