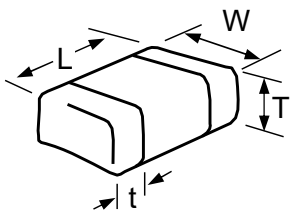
KGU02ACG1E1R0A#

(01005, 0.22mmMax, 25V, CG, 1pF, +/-0.05 pF, Sn Term)

Multilayer Ceramic Chip Capacitor Datasheet

DIMENSIONS



	millimetres	inches
L	0.4±0.02	0.016±0.0008
W	0.2±0.02	0.008±0.0008
T max.	0.22	0.0088
t	0.07 to 0.14	0.003 to 0.006

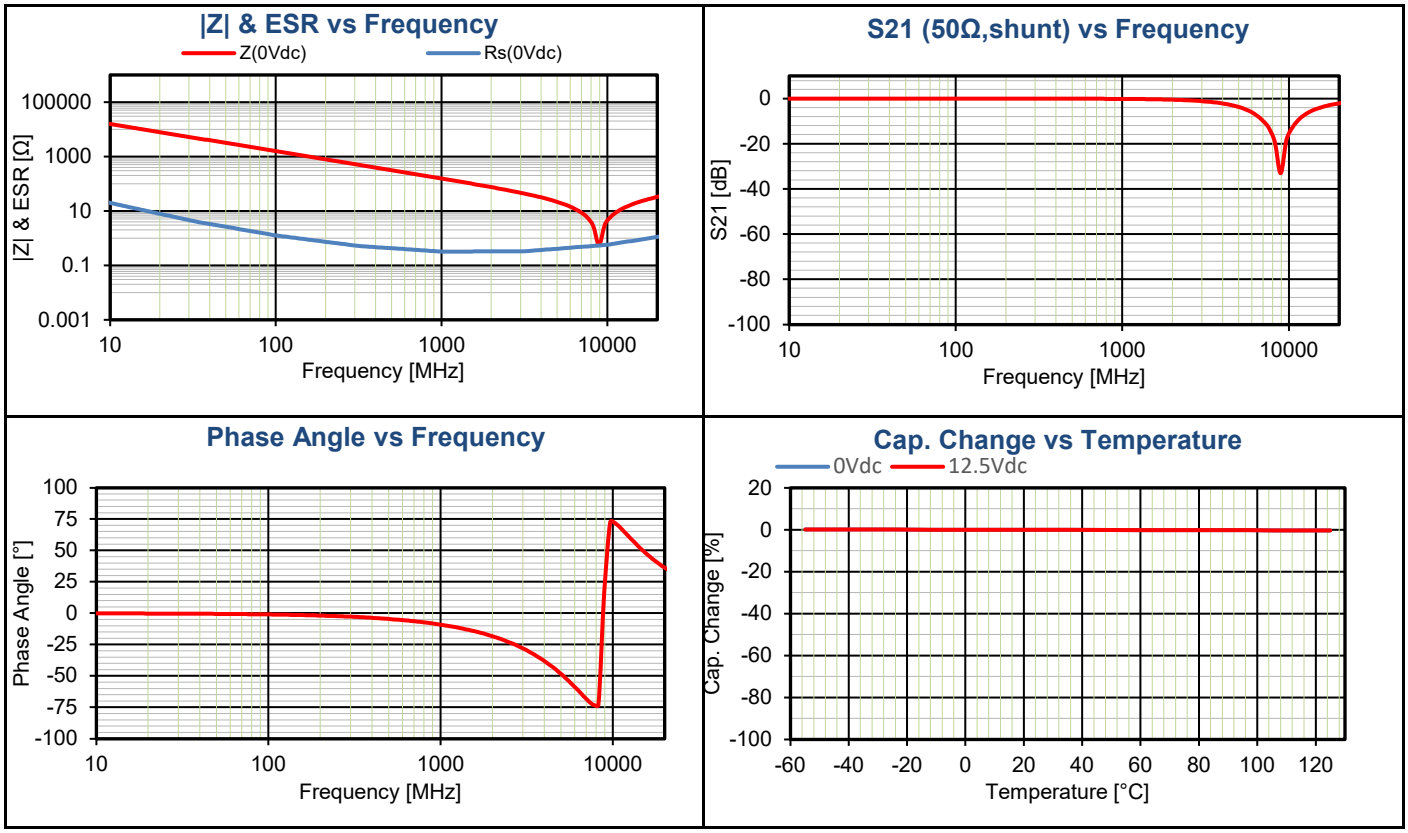
*Inch is for reference only.

BASIC SPECIFICATIONS

Item	Spec.	Conditions
Rated Voltage	25 V	
Capacitance	1pF	1MHz, 1Vrms
Capacitance Tolerance	+/-0.05 pF	
Q Max	420	1MHz, 1Vrms
IR Min	10000 MΩ	25Vdc, t=60s
DWV	62.5 Vdc	I ≤ 50mA, t ≤ 5 s

Case Size EIA (JIS)	01005(0402)
Operating Temperature	-55℃ to +125℃
Dielectric	CG
Grade	General
RoHS Compliant	Yes
Termination	Sn
Packaging	T&R 7in (180mm) & T&R 13in (330mm)

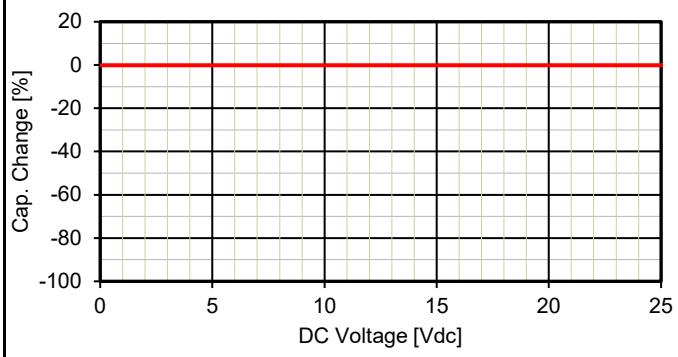
ELECTRICAL CHARACTERISTICS



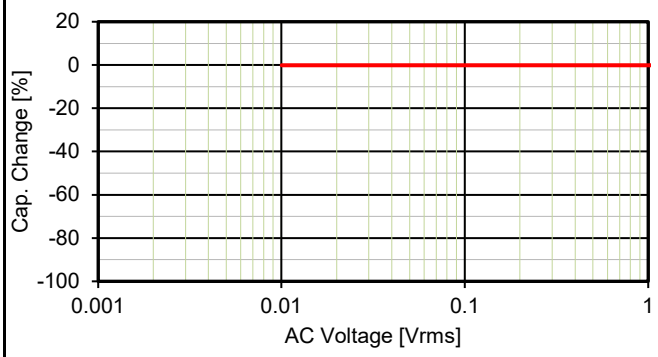
© KYOCERA AVX

ELECTRICAL CHARACTERISTICS

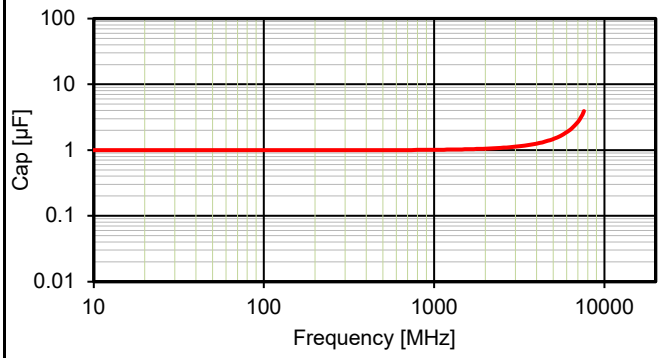
Cap. Change vs DC Voltage



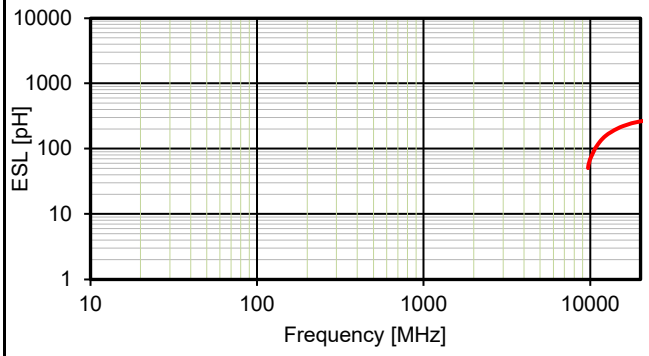
Cap. Change vs AC Voltage



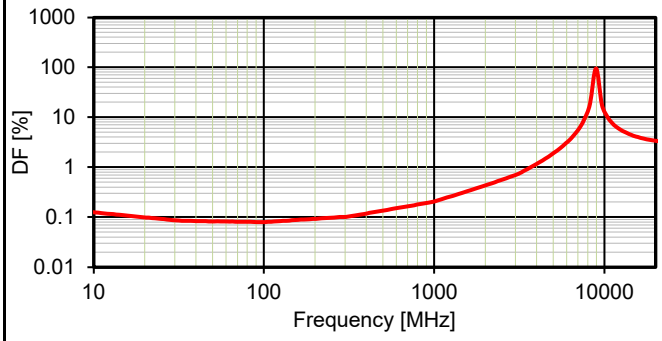
Cap vs Frequency



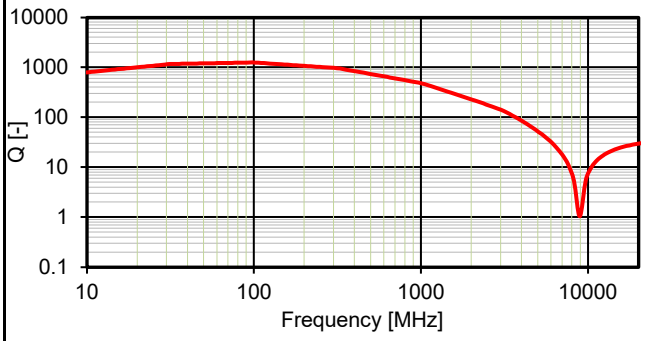
ESL vs Frequency



DF vs Frequency



Q vs Frequency



© KYOCERA AVX

PART NUMBER INFORMATION

K	G	U	02	A	CG	1E	1R0	A	P	□□□□
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.

1.Symbol

KAVX

2.Grade

G General
A Automotive (AEC-Q200)
M Medical

3.Requirement

M Standard
U Hi-Q
E ESD
T Low Profile
L Low Inductance
A Low Inductance (LGA)
F Flexiterm®
S Flexisafe
Q Ultra Low ESR
N 3term

4.Size

02 01005
03 0201
05 0402
15 0603
21 0805
31 1206
32 1210
42 1808
43 1812
44 1825
55 2220
56 2225
91 3640

5.Thickness

See catalog for list of codes

6.Dielectric

CG C0G
CH C0H
R5 X5R
S6 X6S
T6 X6T
R7 X7R
S7 X7S
T7 X7T
R8 X8R
L8 X8L
G8 X8G
V5 Y5V
K7 X7R(KAVX)

7.Voltage

Multiplier		Base	
0	1x	A	1
1	10x	N	1.5
2	100x	C	1.6
3	1000x	D	2
		E	2.5
		U	3
		V	3.5
		G	4
		H	5
		J	6.3

Example

1E = 25V (10 x 2.5)

8.Capacitance

Capacitance expressed in pF

2 significant digits
+ No. of zeros

For Values < 10pF Letter R denotes decimal point

Example

R50 0.5pF
1R0 1pF
100 10pF
101 100pF
103 10nF
105 1µF
107 100µF

9.Tolerance

A +/-0.05pF
B +/-0.1pF
C +/-0.25pF
D +/-0.5pF
F +/-1%
G +/-2%
J +/-5%
K +/-10%
M +/-20%
Z +80/-20%

10.Packing

T&R 180mm(7in)
H
T
U
Y
V
P
Q

T&R 330mm(13in)
M
L
N
K
S
W

Waffle
X

11.Option

See catalog for optional codes

Please check catalog for part number availability

NOTICE: Specifications are subject to change without notice. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee or responsibility of any kind, expressed or implied. Specifications are typical and may not apply to all applications.