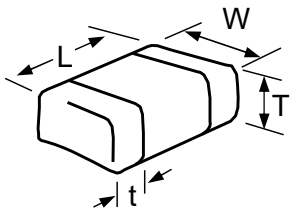
KAM15AR70E105M#

(0603, 2.5V, X7R, 1µF, +/-20%, AEC-Q200, Sn Term)

Multilayer Ceramic Chip Capacitor Datasheet

DIMENSIONS



	millimetres	inches
L	1.6±0.1	0.063±0.004
W	0.8±0.1	0.032±0.004
T max.	0.90	0.036
t	0.2 to 0.6	0.008 to 0.024

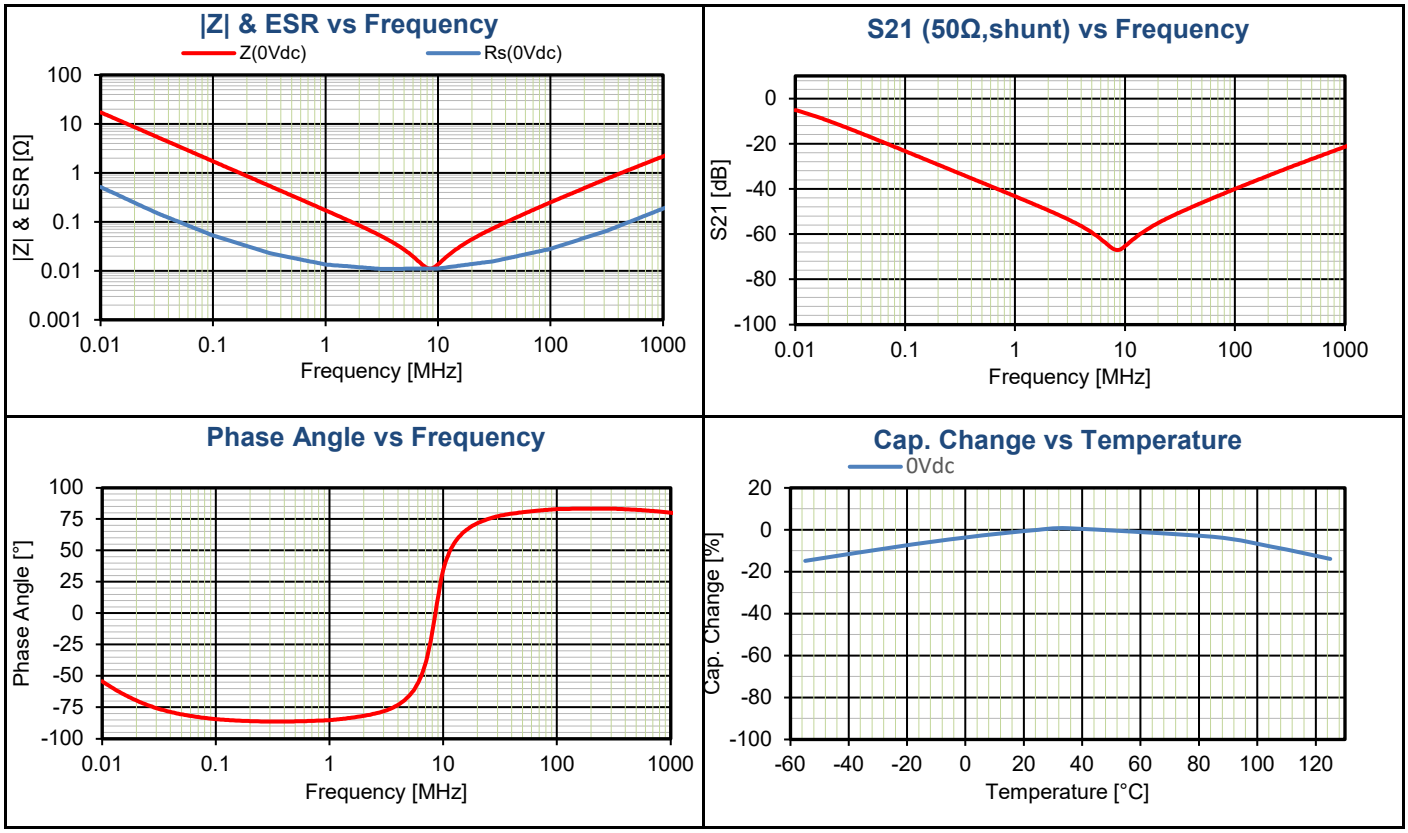
*Inch is for reference only.

BASIC SPECIFICATIONS

Item	Spec.	Conditions
Rated Voltage	2.5V	
Capacitance	1µF	1kHz, 0.5Vrms
Capacitance Tolerance	+/-20%	
DF Max	10 %	1kHz, 0.5Vrms
IR Min	50 MΩ	2.5Vdc, t=60s
DWV	6.25 Vdc	I ≤ 50mA, t ≤ 5 s

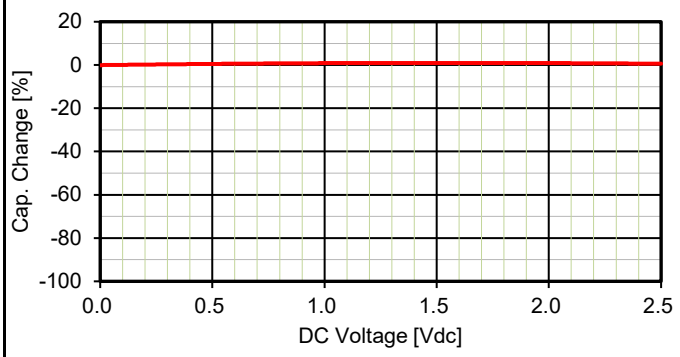
Case Size EIA (JIS)	0603(1608)
Operating Temperature	-55℃ to +125℃
Dielectric	X7R
Grade	AEC-Q200
RoHS Compliant	Yes
Termination	Sn
Packaging	T&R 7in (180mm) & T&R 13in (330mm)

ELECTRICAL CHARACTERISTICS

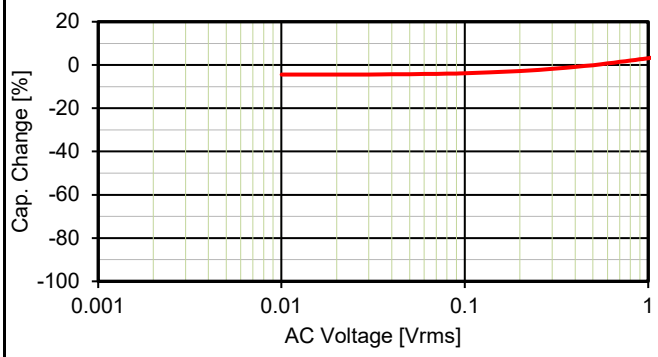


ELECTRICAL CHARACTERISTICS

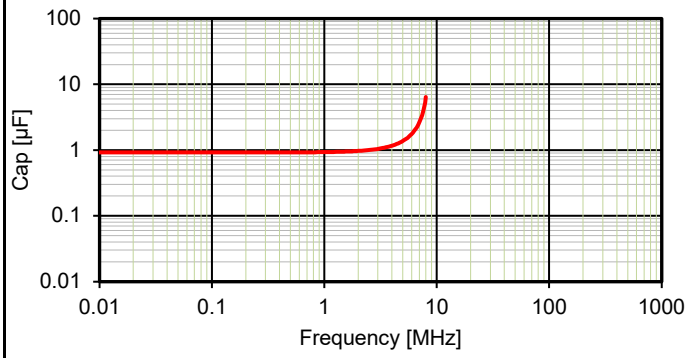
Cap. Change vs DC Voltage



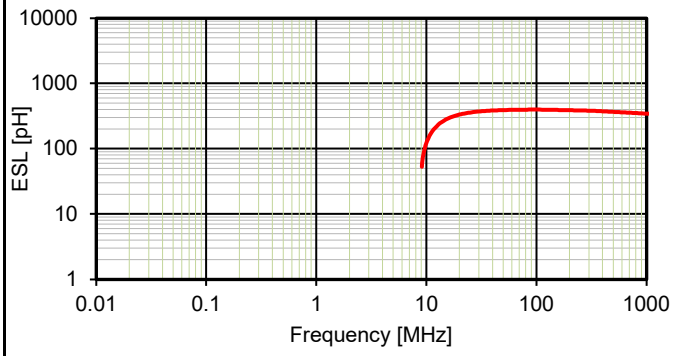
Cap. Change vs AC Voltage



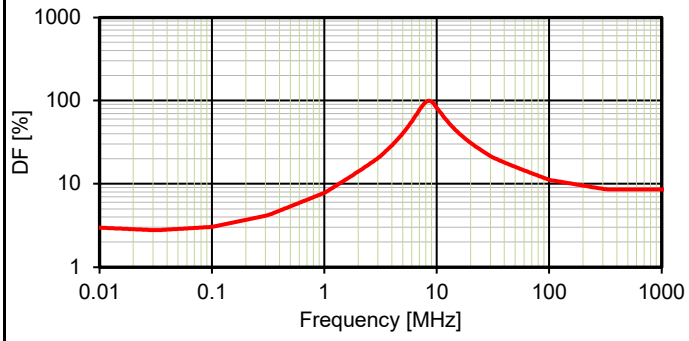
Cap vs Frequency



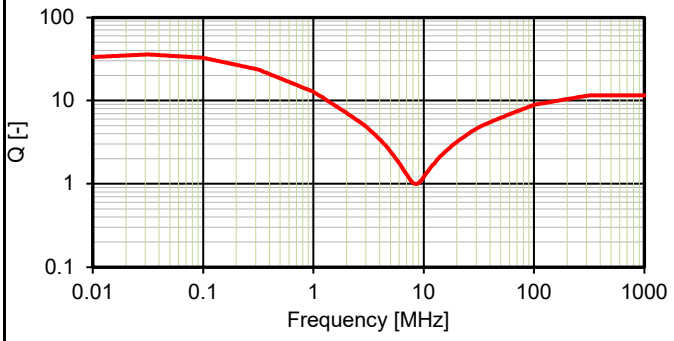
ESL vs Frequency



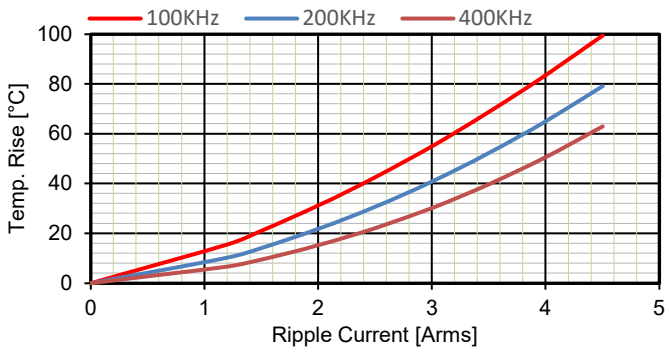
DF vs Frequency



Q vs Frequency



Temp. Rise vs Ripple Current



PART NUMBER INFORMATION

K	A	M	15	A	R7	0E	105	M	#	□□□□
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