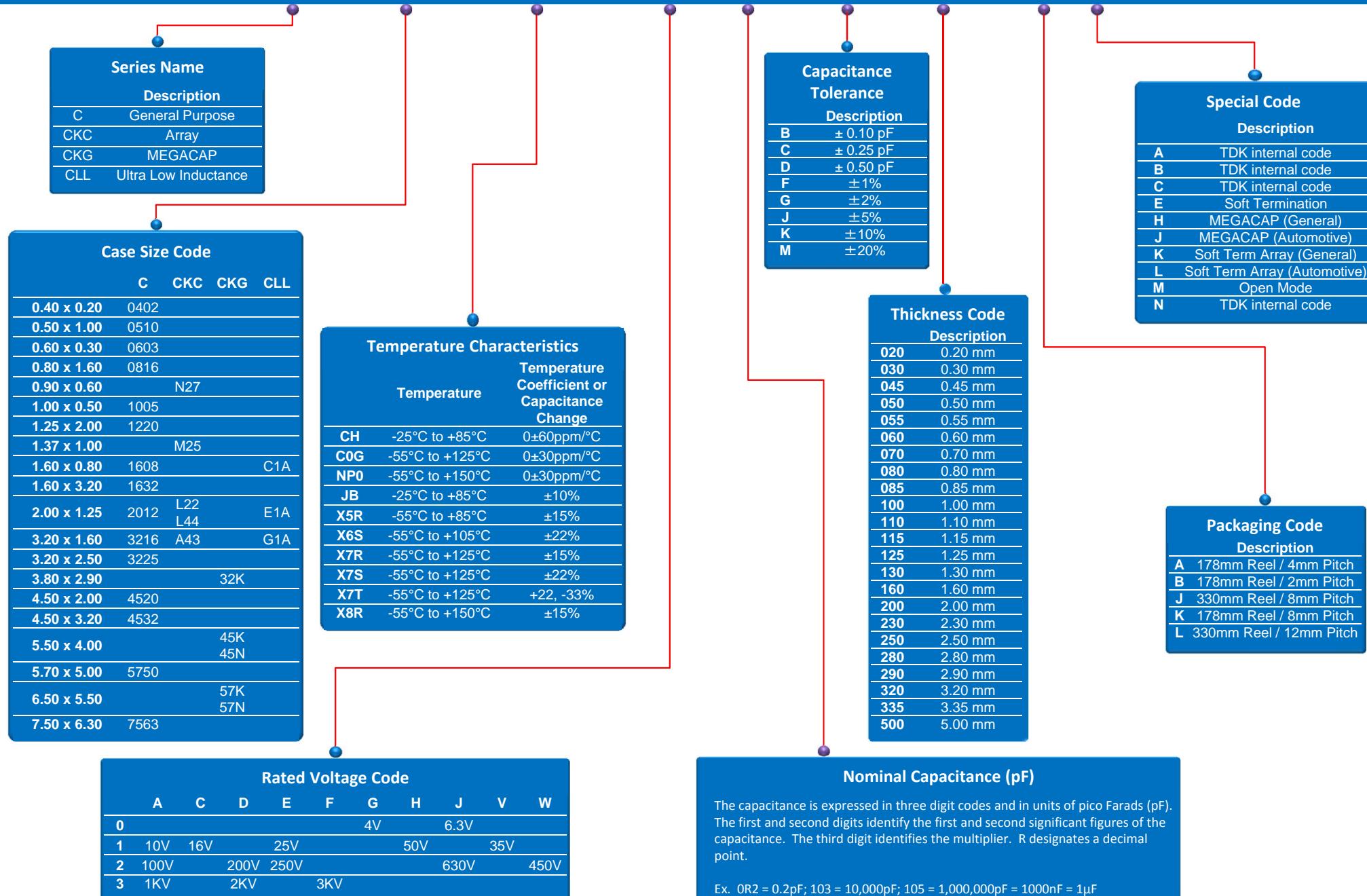


# TDK MLCC Catalog Number Description

## C.3216.X7R.1H.105.K.160.A.B



# TDK MLCC Catalog Number Description

**CGA.5.L.3.X7R.1H.105.K.160.A.E**

Series Name	
CGA	Automotive Grade
CGJ	High Reliability Grade
CEU	Serial Design

Case Size Code		
CGA	CGJ	CEU
0.60 x 0.30	1	
1.00 x 0.50	2	2
1.60 x 0.80	3	3
2.00 x 1.25	4	4
3.20 x 1.60	5	5
3.20 x 2.50	6	
4.50 x 2.00	7	
4.50 x 3.20	8	
5.70 x 5.00	9	

## Thickness Code

Description	
A	0.30 mm
B	0.50 mm
C	0.60 mm
E	0.80 mm
F	0.85 mm
G	1.10 mm
H	1.15 mm
J	1.25 mm
K	1.30 mm
L	1.60 mm
M	2.00 mm
N	2.30 mm
P	2.50 mm
Q	2.80 mm
R	3.20 mm

## Capacitance Tolerance

Description	
C	$\pm 0.25 \text{ pF}$
D	$\pm 0.50 \text{ pF}$
F	$\pm 1\%$
J	$\pm 5\%$
K	$\pm 10\%$
M	$\pm 20\%$

## Special Code

Description	
A	TDK internal code
B	TDK internal code
C	TDK internal code
D	Conductive Epoxy
E	Soft Termination
M	Open Mode

## Packaging Code

Description	
A	178mm Reel / 4mm Pitch
B	178mm Reel / 2mm Pitch
K	178mm Reel / 8mm Pitch

## Nominal Capacitance (pF)

The capacitance is expressed in three digit codes and in units of pico Farads (pF). The first and second digits identify the first and second significant figures of the capacitance. The third digit identifies the multiplier. R designates a decimal point.

Ex. OR2 = 0.2pF; 103 = 10,000pF; 105 = 1,000,000pF = 1000nF = 1μF

Life Test Condition or Function Identification Code	
Description	
1	1.0 x Rated Voltage
2	2.0 x Rated Voltage
3	1.5 x Rated Voltage
4	1.2 x Rated Voltage
A	ESD Protection

## Temperature Characteristics

Temperature	Temperature Coefficient or Capacitance Change
C0G	-55°C to +125°C $0 \pm 30 \text{ ppm}/^\circ\text{C}$
NPO	-55°C to +150°C $0 \pm 30 \text{ ppm}/^\circ\text{C}$
X5R	-55°C to +85°C $\pm 15\%$
X6S	-55°C to +105°C $\pm 22\%$
X7R	-55°C to +125°C $\pm 15\%$
X7S	-55°C to +125°C $\pm 22\%$
X7T	-55°C to +125°C $+22, -33\%$
X8R	-55°C to +150°C $\pm 15\%$

## Rated Voltage Code

A	C	D	E	F	H	J	V	W
0							6.3V	
1	10V	16V		25V		50V	35V	
2	100V		200V	250V		500V	630V	450V
3	1KV		2KV		3KV			

## Thickness Code

Description	
030	0.30 mm
050	0.50 mm
055	0.55 mm
060	0.60 mm
080	0.80 mm
085	0.85 mm
110	1.10 mm
115	1.15 mm
125	1.25 mm
130	1.30 mm
160	1.60 mm
200	2.00 mm
230	2.30 mm
250	2.50 mm
280	2.80 mm
320	3.20 mm

# TDK MLCC Catalog Number Description

## CGB.3.C.1.X5R.0J.106.M.065.A.C

