

# C Series—General Applications MLCC Kit

### **Consumer Grade General Applications Capacitor Kit**

TDK's X7R and X7S (125°C) MLCCs provide extremely dependable performance when subjected to industrial grade temperature extremes. Through an advanced manufacturing process, TDK offers MLCCs with a unique monolithic structure to ensure superior mechanical strength and reliability. Low electric permittivity materials are used to promote less DC bias dependence when compared to X5R (85°C) products. This also provides improved circuit function due to lower ESR and ESL characteristics. Specifically, TDK's newer X7S ceramics provide smaller grains and increased packing density to promote longer system life and higher capacitance in smaller packages. Both X7R and X7S capacitor are optimally suited for a variety of applications.

#### **Features**

- Low electric permittivity materials, which have less DC bias dependence
- Unique monolithic structure to ensure superior mechanical strength
- X7S items provide smaller grains and increased packing density to promote longer system life and higher capacitance in small packages
- Improved circuit function due to lower ESR and ESL characteristics

125°C (X7R/X7S)

Up to 50V

Consumer









**Datasheet** 

#### **Applications**

- General Electronic Equipment
- **LED Lighting**
- **DC-DC Converters**
- Office Automation Equipment
- Portable Electronics: Notebooks, Tablets, etc. Network Infrastructure: Servers, Switchers, Routers, etc.

### CX7-AC01-E3-KIT General Applications Kit Includes:

Case Size: 1005-5750 (EIA 0402-2220) Rated Voltage: 6.3V-50V Capacitance Range: 1000pF-47µF





# **CX7-AC01-E3-KIT General Applications Kit Includes:**

TDK Item List	Item Description
C1005X7R1H102K050BA	General Applications - SMD/SMT - 0402 1000pF ±10% X7R 50V
C1005X7R1H152K050BA	General Applications - SMD/SMT - 0402 1500pF ±10% X7R 50V
C1005X7R1H222K050BA	General Applications - SMD/SMT - 0402 2200pF ±10% X7R 50V
C1005X7R1H332K050BA	General Applications - SMD/SMT - 0402 3300pF ±10% X7R 50V
C1005X7R1H472K050BA	General Applications - SMD/SMT - 0402 4700pF ±10% X7R 50V
C1005X7R1H682K050BA	General Applications - SMD/SMT - 0402 6800pF ±10% X7R 50V
C1005X7R1H103K050BB	General Applications - SMD/SMT - 0402 0.01μF ±10% X7R 50V
C1005X7R1H223K050BB	General Applications - SMD/SMT - 0402 0.022μF ±10% X7R 50V
C1005X7R1H473K050BB	General Applications - SMD/SMT - 0402 0.047μF ±10% X7R 50V
C1608X7R1H104K080AA	General Applications - SMD/SMT - 0603 0.1μF ±10% X7R 50V
C1608X7R1H224K080AB	General Applications - SMD/SMT - 0603 0.22μF ±10% X7R 50V
C1608X7R1H474K080AC	General Applications - SMD/SMT - 0603 0.47μF ±10% X7R 50V
C1608X7R1C105K080AC	General Applications - SMD/SMT - 0603 1μF ±10% X7R 16V
C2012X7R1H105K125AB	General Applications - SMD/SMT - 0805 1μF ±10% X7R 50V
C1608X7R1A225K080AC	General Applications - SMD/SMT - 0603 2.2μF ±10% X7R 10V
C2012X7R1H225K125AC	General Applications - SMD/SMT - 0805 2.2μF ±10% X7R 50V
C1608X7S1A475K080AC	General Applications - SMD/SMT - 0603 4.7μF ±10% X7S 10V
C3216X7R1H475K160AC	General Applications - SMD/SMT - 1206 4.7μF ±10% X7R 50V
C2012X7R1A106K125AC	General Applications - SMD/SMT - 0805 10μF ±10% X7R 10V
C3225X7S1H106K250AB	General Applications - SMD/SMT - 1210 10μF ±10% X7S 50V
C2012X7S1A226M125AC	General Applications - SMD/SMT - 0805 22μF ±20% X7S 10V
C4532X7R1E226M250KC	General Applications - SMD/SMT - 1812 22μF ±20% X7R 25V
C3216X7S0J476M160AC	General Applications - SMD/SMT - 1206 47μF ±20% X7S 6.3V
C5750X7R1C476M230KB	General Applications - SMD/SMT - 2220 47μF ±20% X7R 16V