# &TDK

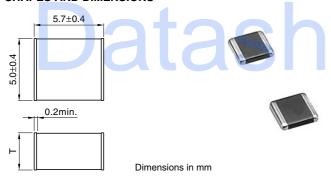
# C Series C5750(EIA CC2220) Type

#### **Conformity to RoHS Directive**

#### **FEATURES**

- High capacitance has been achieved through precision technologies that enable the use of multiple thinner ceramic dielectric layers.
- A monolithic structure ensures superior mechanical strength and reliability.
- High-accuracy automatic mounting is facilitated through the maintenance of very precise dimensional tolerances.
- Composed of only ceramics and metals, these capacitors provide extremely dependable performance, exhibiting virtually no degradation even when subjected to temperature extremes.
- Low stray capacitance ensures high conformity with nominal values, thereby simplifying the circuit design process.
- Low residual inductance assures superior frequency characteristics.
- Because electrostatic capacity has been obtained up to the electrolytic capacitor range, these capacitors offer long service life and are optimally suited for power supply designs that require high levels of reliability.
- Owing to their low ESR and excellent frequency characteristics, these products are optimally suited for high frequency and highdensity type power supplies.

#### **SHAPES AND DIMENSIONS**



#### PRODUCT IDENTIFICATION

С	5750	JB	1E	106	Κ	
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

# (2) Dimensions L×W 5750 5.7×5.0mm

# (3) Capacitance temperature characteristics Class 2 (Temperature stable and general purpose)

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Temperature characteristics	Capacitance change	Temperature range	
JB	±10%	−25 to +85°C	
JF	+30, -80%	–25 to +85°C	
X7R	±15%	−55 to +125°C	
X5R	±15%	−55 to +85°C	
Y5V	+22, -82%	−30 to +85°C	

(4) Rated	voltage Edc	
1A	10V	
1C	16V	
1E	25V	
1H	50\/	

#### (5) Nominal capacitance

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.

	J	•
010	1pF	
100	10pF	
102	1,000pF	

#### (6) Capacitance tolerance

(o) Supusitarios tererarios					
K	±10%				
M	±20%				
Z	+80, -20%				

#### (7) Packaging style

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Т		Taping (reel)
В		Bulk

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



#### **CAPACITANCE RANGES: CLASS 2**

### TEMPERATURE CHARACTERISTICS: JB(±10%), X5R/X7R(±15%)

RATED VOLTAGE Edc: 25V

Capacitance	Tolerance	Thickness T	Part No.			
(pF)	Tolerance	(mm)	Temperature characteristics: JB	Temperature characteristics: X5R	Temperature characteristics: X7R	
10,000,000	±10%	2.0±0.20	C5750JB1E106K	C5750X5R1E106K	C5750X7R1E106K	
	±20%	2.0±0.20	C5750JB1E106M	C5750X5R1E106M	C5750X7R1E106M	

# TEMPERATURE CHARACTERISTICS: X5R/X7R(±15%)

RATED VOLTAGE Edc: 50V

Capacitance	Tolerance	Thickness T	Part No.		
(pF)	Tolerance	(mm)	Temperature characteristics: X5R	Temperature characteristics: X7R	
10,000,000	±10%	2.3±0.20	C5750X5R1H106K	C5750X7R1H106K	
10,000,000	±20%	2.3±0.20	C5750X5R1H106M	C5750X7R1H106M	

#### RATED VOLTAGE Edc: 16V

Capacitance Tolerance		Thickness T	Part No.		
(pF)	Tolerance	(mm)	Temperature characteristics: X5R	Temperature characteristics: X7R	
33,000,000	±20%	2.0±0.20	C5750X5R1C336M	C5750X7R1C336M	
47,000,000	±20%	2.3±0.20	C5750X5R1C476M	C5750X7R1C476M	

#### **TEMPERATURE CHARACTERISTICS: X5R(±15%)**

RATED VOLTAGE Edc: 10V

Capacitance	Tolerance	Thickness T	Part No.
(pF)	Tolerance	(mm)	Temperature characteristics: X5R
68,000,000	±20%	2.3±0.20	C5750X5R1A686M
100,000,000	±20%	2.8±0.30	C5750X5R1A107M

#### RATED VOLTAGE Edc: 6.3V

Capacitance	Tolerance	Thickness T	Part No.
(pF)	Tolerance	(mm)	Temperature characteristics: X5R
100,000,000	±20%	2.8±0.30	C5750X5R0J107M

# TEMPERATURE CHARACTERISTICS: JF(+30, -80%), Y5V(+22, -82%)

RATED VOLTAGE Edc: 50V

Capacitance	Tolerance	Thickness T	Part No.	
(pF)	Tolerance	(mm)	Temperature characteristics: JF	Temperature characteristics: Y5V
22,000,000	+80,–20%	2.0±0.20	C5750JF1H226Z	C5750Y5V1H226Z

#### RATED VOLTAGE Edc: 25V

Capacitance	Tolerance	Thickness T	Part No.		
(pF)		(mm)	Temperature characteristics: JF	Temperature characteristics: Y5V	
47,000,000	+80,-20%	2.0±0.20	C5750JF1E476Z	C5750Y5V1E476Z	

# RATED VOLTAGE Edc: 16V

Capacitance	Tolerance	Thickness T	Part No.	
(pF)		(mm)	Temperature characteristics: JF	Temperature characteristics: Y5V
100,000,000	+80,–20%	2.5±0.30	C5750JF1C107Z	C5750Y5V1C107Z

<sup>•</sup> For more information about the products of other capacitance or data, please contact us.