December 2015

Capacitor with Multi-layer Lead

Conventional product∗

Commercial Grade

FK Series

(∗) For a new design, FA or FG Series with halogen-free specification are recommended.

Type:

General (Up to 50V)
FK28, FK18
FK24, FK14
FK26, FK16
FK20, FK11
FK22

Mid Voltage (100 to 630V)
FK28, FK18
FK24, FK14
FK26, FK16
FK20, FK11
FK22

Capacitor with Multi-layer Lead

Commercial Grade

Product compatible with RoHS directive

Overview of the FK General (Up to 50V) Series

FEATURES

- High capacitance has been achieved through improvements in the thinning process of ceramic dielectric layers and multi-layer lamination technology.
- High reliability is maintained under specified environmental conditions.
- Low residual inductance and excellent frequency characteristics has been achieved.
- The leads are formed with a "kink" to achieve consistent insertion heights and facilitate the release of gases during soldering for dramatically improved solderability.
- Taping specifications are available for automatic insertions, which contribute to reduce on-board costs.

PRODUCT IDENTIFICATION

FK	28	C0G	1H	101	J	□□□□
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions and shapes of lead wire

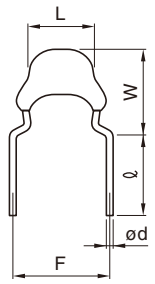


Fig.1

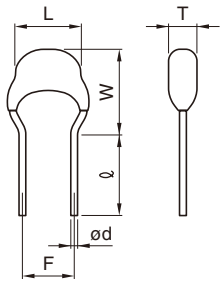


Fig.2

Dimensions in mm

Type	L max.	W max.	T max.	F	ℓ	ød	Fig
28	4.0	5.5	2.5	5.0±1.0	7±2	0.5+0.1,–0.03	1
24	4.5	5.5	2.5	5.0±1.0	7±2	0.5+0.1,–0.03	1
26	5.5	6.0	3.5	5.0±1.0	7±2	0.5+0.1,–0.03	1
20	5.5	7.0	4.0	5.0±1.0	7±2	0.5+0.1,–0.03	1
22	7.5	8.0	4.0	5.0±1.0	7±2	0.5+0.1,–0.03	1
18	4.0	5.5	2.5	2.5±0.8	5+3,–1	0.5+0.1,–0.03	2
14	4.5	5.5	2.5	2.5±0.8	5+3,–1	0.5+0.1,–0.03	2
16	5.5	6.0	3.5	2.5±0.8	5+3,–1	0.5+0.1,–0.03	2
11	5.5	7.0	4.0	2.5±0.8	5+3,–1	0.5+0.1,–0.03	2

(3) Capacitance temperature characteristics

Class 1 (Temperature compensation)

Temperature characteristics	Capacitance change	Temperature range
C0G	0±30ppm/°C	–55 to +125°C

Class 2 (Temperature stable and general purpose)

Temperature characteristics	Capacitance change	Temperature range
X7R	±15%	–55 to +125°C
X5R	±15%	–55 to +85°C
X7S	±22%	–55 to +125°C

(4) Rated voltage Edc

0J	6.3V
1A	10V
1C	16V
1E	25V
1H	50V

(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.

0R5	0.5pF
010	1pF
100	10pF
102	1,000pF

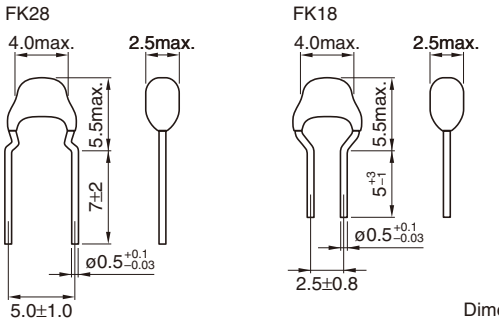
(6) Capacitance tolerance

Symbol	Tolerance	Applicable capacitance range
C	±0.25pF	10pF max.
D	±0.5pF	
J	±5%	Over 10pF
K	±10%	
M	±20%	

(7) TDK internal code

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2011/65/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 1 (TEMPERATURE COMPENSATION)
FK28 AND FK18 TYPES
SHAPES AND DIMENSIONS

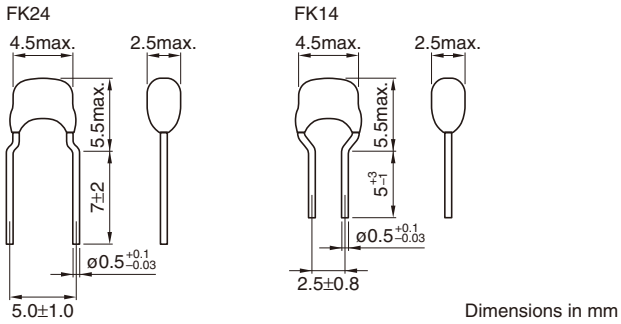


Dimensions in mm

RATED VOLTAGE Edc: 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK28 type	FK18 type
C0G	1pF	±0.25pF	50	FK28C0G1H010C	FK18C0G1H010C
C0G	1.5pF	±0.25pF	50	FK28C0G1H1R5C	FK18C0G1H1R5C
C0G	2pF	±0.25pF	50	FK28C0G1H020C	FK18C0G1H020C
C0G	2.2pF	±0.25pF	50	FK28C0G1H2R2C	FK18C0G1H2R2C
C0G	3pF	±0.25pF	50	FK28C0G1H030C	FK18C0G1H030C
C0G	3.3pF	±0.25pF	50	FK28C0G1H3R3C	FK18C0G1H3R3C
C0G	4pF	±0.25pF	50	FK28C0G1H040C	FK18C0G1H040C
C0G	4.7pF	±0.25pF	50	FK28C0G1H4R7C	FK18C0G1H4R7C
C0G	5pF	±0.25pF	50	FK28C0G1H050C	FK18C0G1H050C
C0G	6pF	±0.5pF	50	FK28C0G1H060D	FK18C0G1H060D
C0G	6.8pF	±0.5pF	50	FK28C0G1H6R8D	FK18C0G1H6R8D
C0G	7pF	±0.5pF	50	FK28C0G1H070D	FK18C0G1H070D
C0G	8pF	±0.5pF	50	FK28C0G1H080D	FK18C0G1H080D
C0G	9pF	±0.5pF	50	FK28C0G1H090D	FK18C0G1H090D
C0G	10pF	±0.5pF	50	FK28C0G1H100D	FK18C0G1H100D
C0G	12pF	±5%	50	FK28C0G1H120J	FK18C0G1H120J
C0G	15pF	±5%	50	FK28C0G1H150J	FK18C0G1H150J
C0G	18pF	±5%	50	FK28C0G1H180J	FK18C0G1H180J
C0G	22pF	±5%	50	FK28C0G1H220J	FK18C0G1H220J
C0G	27pF	±5%	50	FK28C0G1H270J	FK18C0G1H270J
C0G	33pF	±5%	50	FK28C0G1H330J	FK18C0G1H330J
C0G	39pF	±5%	50	FK28C0G1H390J	FK18C0G1H390J
C0G	47pF	±5%	50	FK28C0G1H470J	FK18C0G1H470J
C0G	56pF	±5%	50	FK28C0G1H560J	FK18C0G1H560J
C0G	68pF	±5%	50	FK28C0G1H680J	FK18C0G1H680J
C0G	82pF	±5%	50	FK28C0G1H820J	FK18C0G1H820J
C0G	100pF	±5%	50	FK28C0G1H101J	FK18C0G1H101J
C0G	120pF	±5%	50	FK28C0G1H121J	FK18C0G1H121J
C0G	150pF	±5%	50	FK28C0G1H151J	FK18C0G1H151J
C0G	180pF	±5%	50	FK28C0G1H181J	FK18C0G1H181J
C0G	220pF	±5%	50	FK28C0G1H221J	FK18C0G1H221J
C0G	270pF	±5%	50	FK28C0G1H271J	FK18C0G1H271J
C0G	330pF	±5%	50	FK28C0G1H331J	FK18C0G1H331J
C0G	390pF	±5%	50	FK28C0G1H391J	FK18C0G1H391J
C0G	470pF	±5%	50	FK28C0G1H471J	FK18C0G1H471J
C0G	560pF	±5%	50	FK28C0G1H561J	FK18C0G1H561J
C0G	680pF	±5%	50	FK28C0G1H681J	FK18C0G1H681J
C0G	820pF	±5%	50	FK28C0G1H821J	FK18C0G1H821J
C0G	1000pF	±5%	50	FK28C0G1H102J	FK18C0G1H102J
C0G	1200pF	±5%	50	FK28C0G1H122J	FK18C0G1H122J
C0G	1500pF	±5%	50	FK28C0G1H152J	FK18C0G1H152J
C0G	1800pF	±5%	50	FK28C0G1H182J	FK18C0G1H182J
C0G	2200pF	±5%	50	FK28C0G1H222J	FK18C0G1H222J
C0G	2700pF	±5%	50	FK28C0G1H272J	FK18C0G1H272J
C0G	3300pF	±5%	50	FK28C0G1H332J	FK18C0G1H332J
C0G	3900pF	±5%	50	FK28C0G1H392J	FK18C0G1H392J
C0G	4700pF	±5%	50	FK28C0G1H472J	FK18C0G1H472J
C0G	5600pF	±5%	50	FK28C0G1H562J	FK18C0G1H562J
C0G	6800pF	±5%	50	FK28C0G1H682J	FK18C0G1H682J
C0G	8200pF	±5%	50	FK28C0G1H822J	FK18C0G1H822J
C0G	10000pF	±5%	50	FK28C0G1H103J	FK18C0G1H103J

FK24 AND FK14 TYPES
SHAPES AND DIMENSIONS

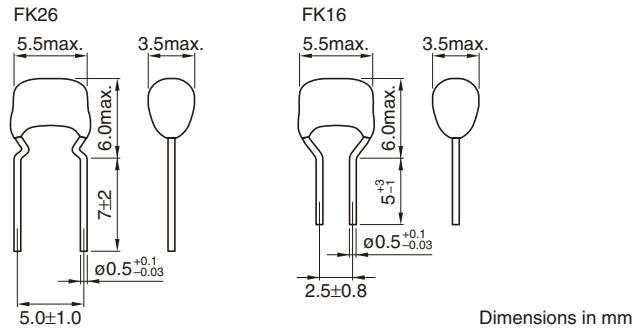


Dimensions in mm

RATED VOLTAGE Edc: 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK24 type	FK14 type
C0G	2700pF	±5%	50	FK24C0G1H272J	FK14C0G1H272J
C0G	3300pF	±5%	50	FK24C0G1H332J	FK14C0G1H332J
C0G	3900pF	±5%	50	FK24C0G1H392J	FK14C0G1H392J
C0G	4700pF	±5%	50	FK24C0G1H472J	FK14C0G1H472J
C0G	5600pF	±5%	50	FK24C0G1H562J	FK14C0G1H562J
C0G	6800pF	±5%	50	FK24C0G1H682J	FK14C0G1H682J
C0G	8200pF	±5%	50	FK24C0G1H822J	FK14C0G1H822J
C0G	10000pF	±5%	50	FK24C0G1H103J	FK14C0G1H103J
C0G	15000pF	±5%	50	FK24C0G1H153J	FK14C0G1H153J
C0G	22000pF	±5%	50	FK24C0G1H223J	FK14C0G1H223J
C0G	33000pF	±5%	50	FK24C0G1H333J	FK14C0G1H333J

FK26 AND FK16 TYPES
SHAPES AND DIMENSIONS

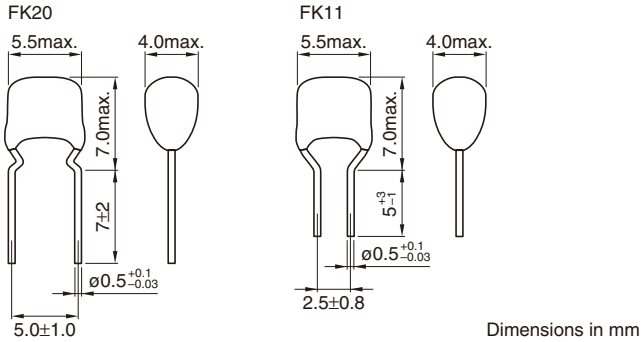


Dimensions in mm

RATED VOLTAGE Edc: 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK26 type	FK16 type
C0G	4700pF	±5%	50	FK26C0G1H472J	FK16C0G1H472J
C0G	5600pF	±5%	50	FK26C0G1H562J	FK16C0G1H562J
C0G	6800pF	±5%	50	FK26C0G1H682J	FK16C0G1H682J
C0G	8200pF	±5%	50	FK26C0G1H822J	FK16C0G1H822J
C0G	10000pF	±5%	50	FK26C0G1H103J	FK16C0G1H103J
C0G	15000pF	±5%	50	FK26C0G1H153J	FK16C0G1H153J
C0G	22000pF	±5%	50	FK26C0G1H223J	FK16C0G1H223J
C0G	33000pF	±5%	50	FK26C0G1H333J	FK16C0G1H333J
C0G	47000pF	±5%	50	FK26C0G1H473J	FK16C0G1H473J
C0G	68000pF	±5%	50	FK26C0G1H683J	FK16C0G1H683J
C0G	0.1µF	±5%	50	FK26C0G1H104J	FK16C0G1H104J

FK20 AND FK11 TYPES
SHAPES AND DIMENSIONS

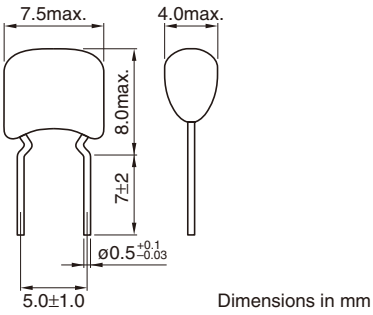


Dimensions in mm

RATED VOLTAGE Edc: 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK20 type	Part No. FK11 type
C0G	22000pF	±5%	50	FK20C0G1H223J	FK11C0G1H223J
C0G	33000pF	±5%	50	FK20C0G1H333J	FK11C0G1H333J
C0G	47000pF	±5%	50	FK20C0G1H473J	FK11C0G1H473J
C0G	68000pF	±5%	50	FK20C0G1H683J	FK11C0G1H683J
C0G	0.1µF	±5%	50	FK20C0G1H104J	FK11C0G1H104J

FK22 TYPE
SHAPES AND DIMENSIONS

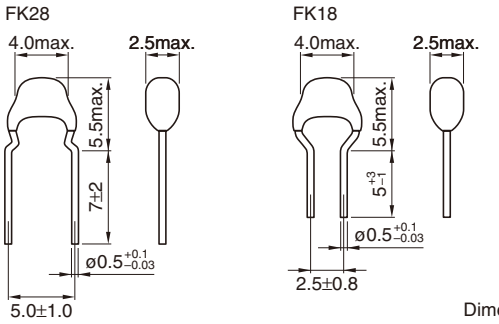


Dimensions in mm

RATED VOLTAGE Edc: 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK22 type
C0G	0.15µF	±5%	50	FK22C0G1H154J
C0G	0.22µF	±5%	50	FK22C0G1H224J

CAPACITANCE RANGES: CLASS 2 (TEMPERATURE STABLE)
FK28 AND FK18 TYPES
SHAPES AND DIMENSIONS



Dimensions in mm

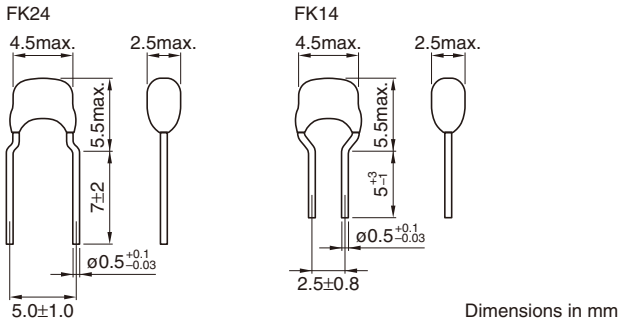
RATED VOLTAGE Edc: 6.3 to 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK28 type	FK18 type
X7R	1000pF	±10%	50	FK28X7R1H102K	FK18X7R1H102K
X7R	1500pF	±10%	50	FK28X7R1H152K	FK18X7R1H152K
X7R	2200pF	±10%	50	FK28X7R1H222K	FK18X7R1H222K
X7R	3300pF	±10%	50	FK28X7R1H332K	FK18X7R1H332K
X7R	4700pF	±10%	50	FK28X7R1H472K	FK18X7R1H472K
X7R	6800pF	±10%	50	FK28X7R1H682K	FK18X7R1H682K
X7R	10000pF	±10%	50	FK28X7R1H103K	FK18X7R1H103K
X7R	15000pF	±10%	50	FK28X7R1H153K	FK18X7R1H153K
X7R	22000pF	±10%	50	FK28X7R1H223K	FK18X7R1H223K
X7R	33000pF	±10%	50	FK28X7R1H333K	FK18X7R1H333K
X7R	47000pF	±10%	50	FK28X7R1H473K	FK18X7R1H473K
X7R	68000pF	±10%	50	FK28X7R1H683K	FK18X7R1H683K
X7R	0.1µF	±10%	50	FK28X7R1H104K	FK18X7R1H104K
X7R	0.15µF	±10%	50	FK28X7R1H154K	FK18X7R1H154K
X7R	0.22µF	±10%	50	FK28X7R1H224K	FK18X7R1H224K
X7R	0.1µF	±10%	25	FK28X7R1E104K	FK18X7R1E104K
X7R	0.15µF	±10%	25	FK28X7R1E154K	FK18X7R1E154K
X7R	0.22µF	±10%	25	FK28X7R1E224K	FK18X7R1E224K
X7R	0.33µF	±10%	25	FK28X7R1E334K	FK18X7R1E334K
X7R	0.47µF	±10%	25	FK28X7R1E474K	FK18X7R1E474K
X7R	0.68µF	±10%	25	FK28X7R1E684K	FK18X7R1E684K
X7R	1µF	±10%	25	FK28X7R1E105K	FK18X7R1E105K
X7R	0.22µF	±10%	16	FK28X7R1C224K	FK18X7R1C224K
X7R	0.33µF	±10%	16	FK28X7R1C334K	FK18X7R1C334K
X7R	0.47µF	±10%	16	FK28X7R1C474K	FK18X7R1C474K
X7R	0.68µF	±10%	16	FK28X7R1C684K	FK18X7R1C684K
X7R	1µF	±10%	16	FK28X7R1C105K	FK18X7R1C105K
X7R	1.5µF	±10%	6.3	FK28X7R0J155K	FK18X7R0J155K
X7R	2.2µF	±10%	6.3	FK28X7R0J225K	FK18X7R0J225K
X5R	0.22µF	±10%	25	FK28X5R1E224K	FK18X5R1E224K
X5R	0.33µF	±10%	25	FK28X5R1E334K	FK18X5R1E334K
X5R	0.47µF	±10%	25	FK28X5R1E474K	FK18X5R1E474K
X5R	0.68µF	±10%	25	FK28X5R1E684K	FK18X5R1E684K
X5R	1µF	±10%	25	FK28X5R1E105K	FK18X5R1E105K
X5R	0.47µF	±10%	16	FK28X5R1C474K	FK18X5R1C474K
X5R	0.68µF	±10%	16	FK28X5R1C684K	FK18X5R1C684K
X5R	1µF	±10%	16	FK28X5R1C105K	FK18X5R1C105K
X5R	1.5µF	±10%	16	FK28X5R1C155K	FK18X5R1C155K
X5R	2.2µF	±10%	16	FK28X5R1C225K	FK18X5R1C225K
X5R	0.33µF	±10%	10	FK28X5R1A334K	FK18X5R1A334K
X5R	0.47µF	±10%	10	FK28X5R1A474K	FK18X5R1A474K
X5R	0.68µF	±10%	10	FK28X5R1A684K	FK18X5R1A684K
X5R	1µF	±10%	10	FK28X5R1A105K	FK18X5R1A105K
X5R	1.5µF	±10%	10	FK28X5R1A155K	FK18X5R1A155K
X5R	2.2µF	±10%	10	FK28X5R1A225K	FK18X5R1A225K
X5R	3.3µF	±10%	10	FK28X5R1A335K	FK18X5R1A335K
X5R	4.7µF	±10%	10	FK28X5R1A475K	FK18X5R1A475K

RATED VOLTAGE Edc: 6.3 to 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK28 type	FK18 type
X5R	1μF	±10%	6.3	FK28X5R0J105K	FK18X5R0J105K
X5R	1.5μF	±10%	6.3	FK28X5R0J155K	FK18X5R0J155K
X5R	2.2μF	±10%	6.3	FK28X5R0J225K	FK18X5R0J225K
X5R	3.3μF	±10%	6.3	FK28X5R0J335K	FK18X5R0J335K
X5R	4.7μF	±10%	6.3	FK28X5R0J475K	FK18X5R0J475K
X5R	6.8μF	±10%	6.3	FK28X5R0J685K	FK18X5R0J685K
X5R	10μF	±20%	6.3	FK28X5R0J106M	FK18X5R0J106M

FK24 AND FK14 TYPES
SHAPES AND DIMENSIONS

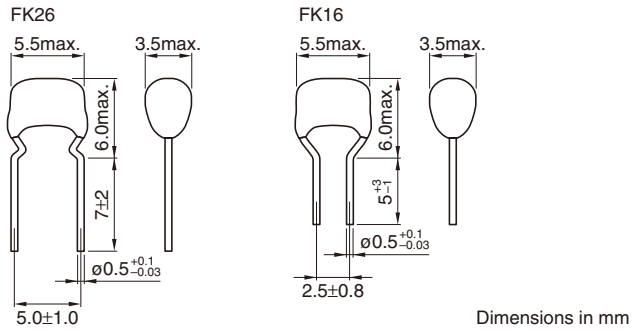


Dimensions in mm

RATED VOLTAGE Edc: 6.3 to 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK24 type	FK14 type
X7R	0.15µF	±10%	50	FK24X7R1H154K	FK14X7R1H154K
X7R	0.22µF	±10%	50	FK24X7R1H224K	FK14X7R1H224K
X7R	0.33µF	±10%	50	FK24X7R1H334K	FK14X7R1H334K
X7R	0.47µF	±10%	50	FK24X7R1H474K	FK14X7R1H474K
X7R	0.68µF	±10%	50	FK24X7R1H684K	FK14X7R1H684K
X7R	1µF	±10%	50	FK24X7R1H105K	FK14X7R1H105K
X7R	0.47µF	±10%	25	FK24X7R1E474K	FK14X7R1E474K
X7R	0.68µF	±10%	25	FK24X7R1E684K	FK14X7R1E684K
X7R	1µF	±10%	25	FK24X7R1E105K	FK14X7R1E105K
X7R	1.5µF	±10%	25	FK24X7R1E155K	FK14X7R1E155K
X7R	2.2µF	±10%	25	FK24X7R1E225K	FK14X7R1E225K
X7R	3.3µF	±10%	25	FK24X7R1E335K	FK14X7R1E335K
X7R	4.7µF	±10%	25	FK24X7R1E475K	FK14X7R1E475K
X7R	0.68µF	±10%	16	FK24X7R1C684K	FK14X7R1C684K
X7R	1µF	±10%	16	FK24X7R1C105K	FK14X7R1C105K
X7R	1.5µF	±10%	16	FK24X7R1C155K	FK14X7R1C155K
X7R	2.2µF	±10%	16	FK24X7R1C225K	FK14X7R1C225K
X7R	3.3µF	±10%	16	FK24X7R1C335K	FK14X7R1C335K
X7R	4.7µF	±10%	16	FK24X7R1C475K	FK14X7R1C475K
X7R	6.8µF	±10%	6.3	FK24X7R0J685K	FK14X7R0J685K
X7R	10µF	±10%	6.3	FK24X7R0J106K	FK14X7R0J106K
X5R	0.68µF	±10%	25	FK24X5R1E684K	FK14X5R1E684K
X5R	1µF	±10%	25	FK24X5R1E105K	FK14X5R1E105K
X5R	1.5µF	±10%	25	FK24X5R1E155K	FK14X5R1E155K
X5R	2.2µF	±10%	25	FK24X5R1E225K	FK14X5R1E225K
X5R	3.3µF	±10%	25	FK24X5R1E335K	FK14X5R1E335K
X5R	4.7µF	±10%	25	FK24X5R1E475K	FK14X5R1E475K
X5R	1µF	±10%	16	FK24X5R1C105K	FK14X5R1C105K
X5R	1.5µF	±10%	16	FK24X5R1C155K	FK14X5R1C155K
X5R	2.2µF	±10%	16	FK24X5R1C225K	FK14X5R1C225K
X5R	3.3µF	±10%	16	FK24X5R1C335K	FK14X5R1C335K
X5R	4.7µF	±10%	16	FK24X5R1C475K	FK14X5R1C475K
X5R	10µF	±10%	16	FK24X5R1C106K	FK14X5R1C106K
X5R	1.5µF	±10%	10	FK24X5R1A155K	FK14X5R1A155K
X5R	2.2µF	±10%	10	FK24X5R1A225K	FK14X5R1A225K
X5R	3.3µF	±10%	10	FK24X5R1A335K	FK14X5R1A335K
X5R	4.7µF	±10%	10	FK24X5R1A475K	FK14X5R1A475K
X5R	6.8µF	±10%	10	FK24X5R1A685K	FK14X5R1A685K
X5R	10µF	±10%	10	FK24X5R1A106K	FK14X5R1A106K
X5R	4.7µF	±10%	6.3	FK24X5R0J475K	FK14X5R0J475K
X5R	6.8µF	±10%	6.3	FK24X5R0J685K	FK14X5R0J685K
X5R	10µF	±10%	6.3	FK24X5R0J106K	FK14X5R0J106K
X5R	15µF	±20%	6.3	FK24X5R0J156M	FK14X5R0J156M
X5R	22µF	±20%	6.3	FK24X5R0J226M	FK14X5R0J226M

FK26 AND FK16 TYPES
SHAPES AND DIMENSIONS

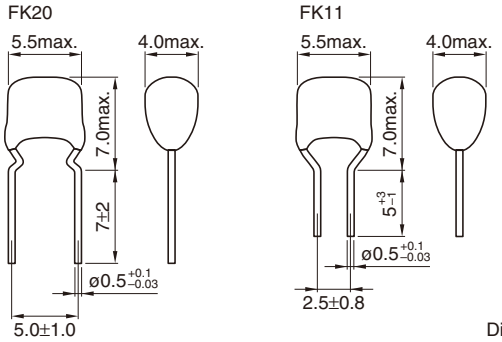


Dimensions in mm

RATED VOLTAGE Edc: 6.3 to 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK26 type	FK16 type
X7R	0.47µF	±10%	50	FK26X7R1H474K	FK16X7R1H474K
X7R	0.68µF	±10%	50	FK26X7R1H684K	FK16X7R1H684K
X7R	1µF	±10%	50	FK26X7R1H105K	FK16X7R1H105K
X7R	1.5µF	±10%	50	FK26X7R1H155K	FK16X7R1H155K
X7R	2.2µF	±10%	50	FK26X7R1H225K	FK16X7R1H225K
X7R	0.68µF	±10%	25	FK26X7R1E684K	FK16X7R1E684K
X7R	1µF	±10%	25	FK26X7R1E105K	FK16X7R1E105K
X7R	1.5µF	±10%	25	FK26X7R1E155K	FK16X7R1E155K
X7R	2.2µF	±10%	25	FK26X7R1E225K	FK16X7R1E225K
X7R	3.3µF	±10%	25	FK26X7R1E335K	FK16X7R1E335K
X7R	4.7µF	±10%	25	FK26X7R1E475K	FK16X7R1E475K
X7R	6.8µF	±10%	25	FK26X7R1E685K	FK16X7R1E685K
X7R	10µF	±10%	25	FK26X7R1E106K	FK16X7R1E106K
X7R	3.3µF	±10%	16	FK26X7R1C335K	FK16X7R1C335K
X7R	4.7µF	±10%	16	FK26X7R1C475K	FK16X7R1C475K
X7R	6.8µF	±10%	16	FK26X7R1C685K	FK16X7R1C685K
X7R	10µF	±10%	16	FK26X7R1C106K	FK16X7R1C106K
X5R	1µF	±10%	50	FK26X5R1H105K	FK16X5R1H105K
X5R	1.5µF	±10%	25	FK26X5R1E155K	FK16X5R1E155K
X5R	2.2µF	±10%	25	FK26X5R1E225K	FK16X5R1E225K
X5R	3.3µF	±10%	25	FK26X5R1E335K	FK16X5R1E335K
X5R	4.7µF	±10%	25	FK26X5R1E475K	FK16X5R1E475K
X5R	3.3µF	±10%	16	FK26X5R1C335K	FK16X5R1C335K
X5R	4.7µF	±10%	16	FK26X5R1C475K	FK16X5R1C475K
X5R	6.8µF	±10%	16	FK26X5R1C685K	FK16X5R1C685K
X5R	10µF	±10%	16	FK26X5R1C106K	FK16X5R1C106K
X5R	6.8µF	±10%	10	FK26X5R1A685K	FK16X5R1A685K
X5R	10µF	±10%	10	FK26X5R1A106K	FK16X5R1A106K
X5R	6.8µF	±10%	6.3	FK26X5R0J685K	FK16X5R0J685K
X5R	10µF	±10%	6.3	FK26X5R0J106K	FK16X5R0J106K
X5R	15µF	±20%	6.3	FK26X5R0J156M	FK16X5R0J156M
X5R	22µF	±20%	6.3	FK26X5R0J226M	FK16X5R0J226M
X5R	33µF	±20%	6.3	FK26X5R0J336M	FK16X5R0J336M
X5R	47µF	±20%	6.3	FK26X5R0J476M	FK16X5R0J476M

FK20 AND FK11 TYPES
SHAPES AND DIMENSIONS



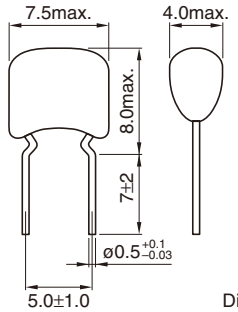
Dimensions in mm

RATED VOLTAGE Edc: 6.3 to 50V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK20 type	FK11 type
X7R	0.68µF	±10%	50	FK20X7R1H684K	FK11X7R1H684K
X7R	1µF	±10%	50	FK20X7R1H105K	FK11X7R1H105K
X7R	1.5µF	±10%	50	FK20X7R1H155K	FK11X7R1H155K
X7R	2.2µF	±10%	50	FK20X7R1H225K	FK11X7R1H225K
X7R	3.3µF	±10%	50	FK20X7R1H335K	FK11X7R1H335K
X7R	4.7µF	±10%	50	FK20X7R1H475K	FK11X7R1H475K
X7R	2.2µF	±10%	25	FK20X7R1E225K	FK11X7R1E225K
X7R	3.3µF	±10%	25	FK20X7R1E335K	FK11X7R1E335K
X7R	4.7µF	±10%	25	FK20X7R1E475K	FK11X7R1E475K
X7R	6.8µF	±10%	25	FK20X7R1E685K	FK11X7R1E685K
X7R	10µF	±10%	25	FK20X7R1E106K	FK11X7R1E106K
X7R	10µF	±10%	16	FK20X7R1C106K	FK11X7R1C106K
X7R	15µF	±20%	16	FK20X7R1C156M	FK11X7R1C156M
X7R	22µF	±20%	16	FK20X7R1C226M	FK11X7R1C226M
X7R	22µF	±20%	10	FK20X7R1A226M	FK11X7R1A226M
X5R	2.2µF	±10%	50	FK20X5R1H225K	FK11X5R1H225K
X5R	3.3µF	±10%	50	FK20X5R1H335K	FK11X5R1H335K
X5R	4.7µF	±10%	25	FK20X5R1E475K	FK11X5R1E475K
X5R	6.8µF	±10%	25	FK20X5R1E685K	FK11X5R1E685K
X5R	10µF	±10%	25	FK20X5R1E106K	FK11X5R1E106K
X5R	10µF	±10%	16	FK20X5R1C106K	FK11X5R1C106K
X5R	15µF	±20%	16	FK20X5R1C156M	FK11X5R1C156M
X5R	22µF	±20%	16	FK20X5R1C226M	FK11X5R1C226M
X5R	15µF	±20%	10	FK20X5R1A156M	FK11X5R1A156M
X5R	22µF	±20%	10	FK20X5R1A226M	FK11X5R1A226M
X5R	22µF	±20%	6.3	FK20X5R0J226M	FK11X5R0J226M
X5R	33µF	±20%	6.3	FK20X5R0J336M	FK11X5R0J336M
X5R	47µF	±20%	6.3	FK20X5R0J476M	FK11X5R0J476M
X5R	68µF	±20%	6.3	FK20X5R0J686M	FK11X5R0J686M
X5R	100µF	±20%	6.3	FK20X5R0J107M	FK11X5R0J107M
X7S	4.7µF	±10%	50	FK20X7S1H475K	FK11X7S1H475K
X7S	6.8µF	±10%	50	FK20X7S1H685K	FK11X7S1H685K
X7S	10µF	±10%	50	FK20X7S1H106K	FK11X7S1H106K

FK22 TYPE

SHAPES AND DIMENSIONS



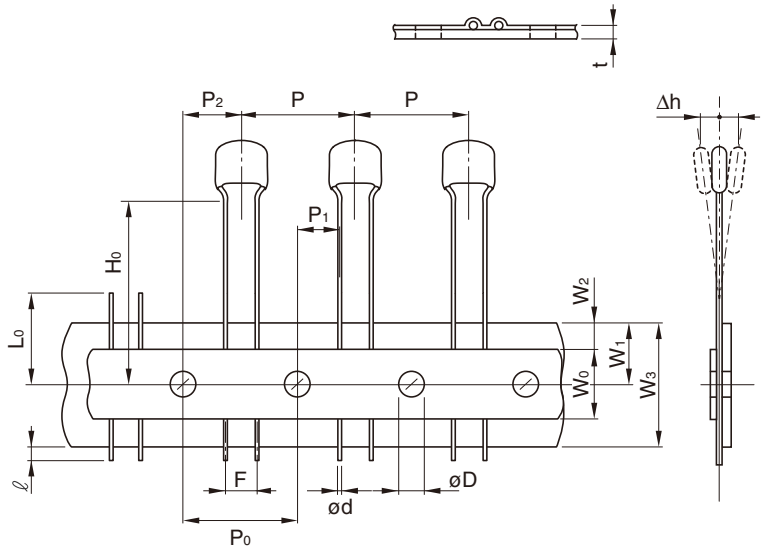
Dimensions in mm

RATED VOLTAGE Edc: 6.3 to 50V

Temperature characteristics	Capacitance (pF)	Tolerance	Rated voltage Edc(V)	Part No. FK22 type
X7R	1.5μF	±10%	50	FK22X7R1H155K
X7R	2.2μF	±10%	50	FK22X7R1H225K
X7R	3.3μF	±10%	50	FK22X7R1H335K
X7R	4.7μF	±10%	50	FK22X7R1H475K
X7R	6.8μF	±10%	50	FK22X7R1H685K
X7R	4.7μF	±10%	25	FK22X7R1E475K
X7R	6.8μF	±10%	25	FK22X7R1E685K
X7R	10μF	±10%	25	FK22X7R1E106K
X7R	15μF	±20%	25	FK22X7R1E156M
X7R	22μF	±20%	25	FK22X7R1E226M
X7R	15μF	±20%	16	FK22X7R1C156M
X7R	22μF	±20%	16	FK22X7R1C226M
X7R	33μF	±20%	16	FK22X7R1C336M
X5R	4.7μF	±10%	50	FK22X5R1H475K
X5R	6.8μF	±10%	50	FK22X5R1H685K
X5R	15μF	±20%	25	FK22X5R1E156M
X5R	22μF	±20%	25	FK22X5R1E226M
X5R	33μF	±20%	16	FK22X5R1C336M
X5R	33μF	±20%	10	FK22X5R1A336M
X5R	47μF	±20%	10	FK22X5R1A476M
X5R	68μF	±20%	6.3	FK22X5R0J686M
X5R	100μF	±20%	6.3	FK22X5R0J107M

• For more information about products with other capacitance or other data, please contact us.

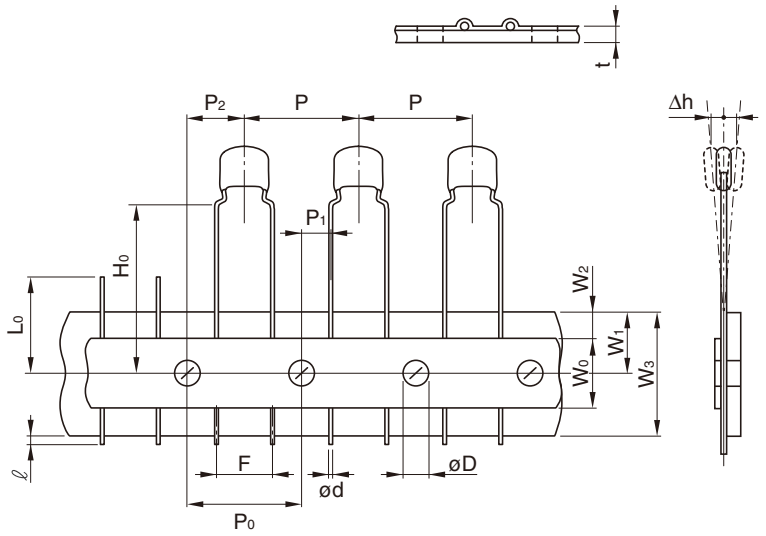
PACKAGING STYLES
TAPING DIMENSIONS
FK1 Series
(FK18, FK14, FK16, FK11 Types)



Symbol	Dimensions (mm)
P	12.7±1.0
P_0*1	12.7±0.3
P_1	5.1±0.7
P_2	6.35±1.3
W_0	12.0±1.0
W_1	9.0±0.5
W_2*2	3.0max.
W_3	18.0+1.0, –0.5
H_0	16.0±0.5
ℓ	1.0max.
t	0.6±0.2
L_0*3	11.0max.
F	2.5+0.5, –0.2
ød	ø0.5+0.1, –0.03
øD	ø4.0±0.2
Δh	0±2

*1 Accumulated pitch tolerance shall be ±2mm for 20 pitches.
*2 Adhesive tape shall not stick out from carrier tape.
*3 The number of consecutive gaps in the product shall be three or less.

FK2 Series
(FK28, FK24, FK26, FK20, FK22 Types)



Symbol	Dimensions (mm)
P	12.7±1.0
P_0*1	12.7±0.3
P_1	3.85±0.7
P_2	6.35±1.3
W_0	12.0±1.0
W_1	9.0±0.5
W_2*2	3.0max.
W_3	18.0+1.0, –0.5
H_0	16.0±0.5
ℓ	1.0max.
t	0.6±0.2
L_0*3	11.0max.
F	5.0+0.8, –0.2
ød	ø0.5+0.1, –0.03
øD	ø4.0±0.2
Δh	0±2

*1 Accumulated pitch tolerance shall be ±2mm for 20 pitches.
*2 Adhesive tape shall not stick out from carrier tape.
*3 The number of consecutive gaps in the product shall be three or less.

PACKAGING QUANTITIES

Type	Quantity
FK28, FK18 FK24, FK14 FK26, FK16	2000 pieces/1box
FK20, FK11 FK22	1500 pieces/1box

Capacitor with Multi-layer Lead

Commercial Grade

Product compatible with RoHS directive

Overview of the FK Mid Voltage (100 to 630V) Series

FEATURES

- The capacitors adopts the unique structure designed by TDK for high voltage applications, realizing a high withstand voltage despite being small in size.
- Rated voltage Edc: 100, 200, and 630V.
- The leads are formed with a "kink" to achieve consistent insertion heights and facilitate the release of gases during soldering for dramatically improved solderability.
- Taping specifications are available for automatic insertions, which contribute to reduce on-board costs.

PRODUCT IDENTIFICATION

FK	28	X7R	2A	102	K	□□□□
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions and shapes of lead wire

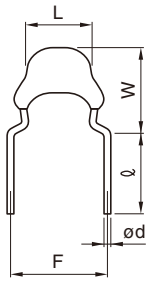


Fig.1

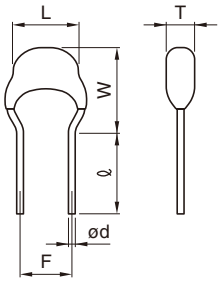


Fig.2

Dimensions in mm

Type	L max.	W max.	T max.	F	ℓ	ød	Fig
28	4.0	5.5	2.5	5.0±1.0	7±2	0.5+0.1,–0.03	1
24	4.5	5.5	2.5	5.0±1.0	7±2	0.5+0.1,–0.03	1
26	5.5	6.0	3.5	5.0±1.0	7±2	0.5+0.1,–0.03	1
20	5.5	7.0	4.0	5.0±1.0	7±2	0.5+0.1,–0.03	1
22	7.5	8.0	4.0	5.0±1.0	7±2	0.5+0.1,–0.03	1
18	4.0	5.5	2.5	2.5±0.8	5+3,–1	0.5+0.1,–0.03	2
14	4.5	5.5	2.5	2.5±0.8	5+3,–1	0.5+0.1,–0.03	2
16	5.5	6.0	3.5	2.5±0.8	5+3, –1	0.5+0.1, –0.03	2
11	5.5	7.0	4.0	2.5±0.8	5+3, –1	0.5+0.1, –0.03	2

(3) Capacitance temperature characteristics

Class 1 (Temperature compensation)

Temperature characteristics	Capacitance change	Temperature range
C0G	0±30ppm/°C	–55 to +125°C

Class 2 (Temperature stable and general purpose)

Temperature characteristics	Capacitance change	Temperature range
X7R	±15%	–55 to +125°C
X7S	±22%	–55 to +125°C

(4) Rated voltage Edc

2A	100V
2E	250V
2J	630V

(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.

102	1,000pF
333	33,000pF
474	470,000pF

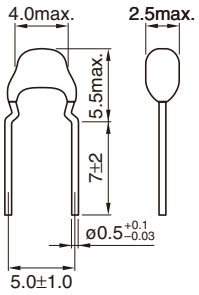
(6) Capacitance tolerance

Symbol	Tolerance
J	±5%
K	±10%

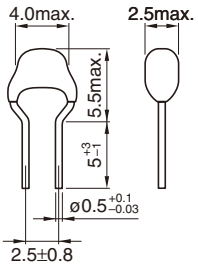
(7) TDK internal code

CAPACITANCE RANGES: CLASS 1 (TEMPERATURE COMPENSATION)
FK28 AND FK18 TYPES
SHAPES AND DIMENSIONS

FK28



FK18

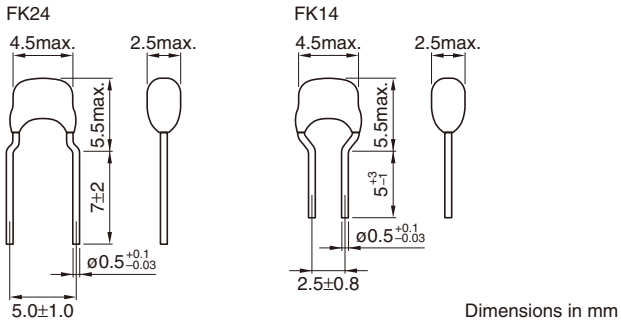


Dimensions in mm

RATED VOLTAGE Edc: 100 to 250V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK28 type	FK18 type
C0G	100pF	±5%	100	FK28C0G2A101J	FK18C0G2A101J
C0G	120pF	±5%	100	FK28C0G2A121J	FK18C0G2A121J
C0G	150pF	±5%	100	FK28C0G2A151J	FK18C0G2A151J
C0G	180pF	±5%	100	FK28C0G2A181J	FK18C0G2A181J
C0G	220pF	±5%	100	FK28C0G2A221J	FK18C0G2A221J
C0G	270pF	±5%	100	FK28C0G2A271J	FK18C0G2A271J
C0G	330pF	±5%	100	FK28C0G2A331J	FK18C0G2A331J
C0G	390pF	±5%	100	FK28C0G2A391J	FK18C0G2A391J
C0G	470pF	±5%	100	FK28C0G2A471J	FK18C0G2A471J
C0G	560pF	±5%	100	FK28C0G2A561J	FK18C0G2A561J
C0G	680pF	±5%	100	FK28C0G2A681J	FK18C0G2A681J
C0G	820pF	±5%	100	FK28C0G2A821J	FK18C0G2A821J
C0G	1000pF	±5%	100	FK28C0G2A102J	FK18C0G2A102J
C0G	1200pF	±5%	100	FK28C0G2A122J	FK18C0G2A122J
C0G	100pF	±5%	250	FK28C0G2E101J	FK18C0G2E101J
C0G	120pF	±5%	250	FK28C0G2E121J	FK18C0G2E121J
C0G	150pF	±5%	250	FK28C0G2E151J	FK18C0G2E151J
C0G	180pF	±5%	250	FK28C0G2E181J	FK18C0G2E181J
C0G	220pF	±5%	250	FK28C0G2E221J	FK18C0G2E221J
C0G	270pF	±5%	250	FK28C0G2E271J	FK18C0G2E271J
C0G	330pF	±5%	250	FK28C0G2E331J	FK18C0G2E331J
C0G	390pF	±5%	250	FK28C0G2E391J	FK18C0G2E391J
C0G	470pF	±5%	250	FK28C0G2E471J	FK18C0G2E471J
C0G	560pF	±5%	250	FK28C0G2E561J	FK18C0G2E561J
C0G	680pF	±5%	250	FK28C0G2E681J	FK18C0G2E681J

FK24 AND FK14 TYPES
SHAPES AND DIMENSIONS

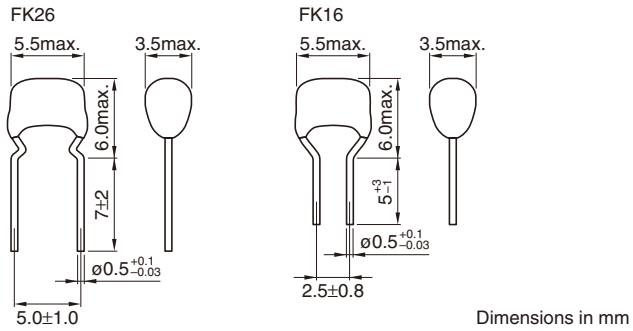


Dimensions in mm

RATED VOLTAGE Edc: 100 to 250V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK24 type	FK14 type
C0G	1000pF	±5%	100	FK24C0G2A102J	FK14C0G2A102J
C0G	1200pF	±5%	100	FK24C0G2A122J	FK14C0G2A122J
C0G	1500pF	±5%	100	FK24C0G2A152J	FK14C0G2A152J
C0G	1800pF	±5%	100	FK24C0G2A182J	FK14C0G2A182J
C0G	2200pF	±5%	100	FK24C0G2A222J	FK14C0G2A222J
C0G	2700pF	±5%	100	FK24C0G2A272J	FK14C0G2A272J
C0G	3300pF	±5%	100	FK24C0G2A332J	FK14C0G2A332J
C0G	3900pF	±5%	100	FK24C0G2A392J	FK14C0G2A392J
C0G	4700pF	±5%	100	FK24C0G2A472J	FK14C0G2A472J
C0G	820pF	±5%	250	FK24C0G2E821J	FK14C0G2E821J
C0G	1000pF	±5%	250	FK24C0G2E102J	FK14C0G2E102J
C0G	1200pF	±5%	250	FK24C0G2E122J	FK14C0G2E122J
C0G	1500pF	±5%	250	FK24C0G2E152J	FK14C0G2E152J
C0G	1800pF	±5%	250	FK24C0G2E182J	FK14C0G2E182J
C0G	2200pF	±5%	250	FK24C0G2E222J	FK14C0G2E222J
C0G	2700pF	±5%	250	FK24C0G2E272J	FK14C0G2E272J

FK26 AND FK16 TYPES
SHAPES AND DIMENSIONS

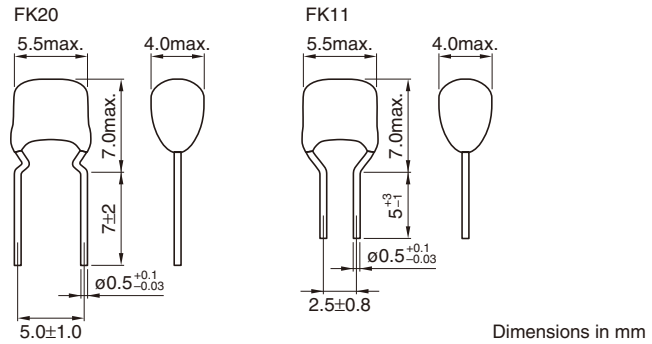


Dimensions in mm

RATED VOLTAGE Edc: 100 to 630V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK26 type	Part No. FK16 type
C0G	3900pF	±5%	100	FK26C0G2A392J	FK16C0G2A392J
C0G	4700pF	±5%	100	FK26C0G2A472J	FK16C0G2A472J
C0G	5600pF	±5%	100	FK26C0G2A562J	FK16C0G2A562J
C0G	6800pF	±5%	100	FK26C0G2A682J	FK16C0G2A682J
C0G	8200pF	±5%	100	FK26C0G2A822J	FK16C0G2A822J
C0G	10000pF	±5%	100	FK26C0G2A103J	FK16C0G2A103J
C0G	3300pF	±5%	250	FK26C0G2E332J	
C0G	3900pF	±5%	250	FK26C0G2E392J	
C0G	4700pF	±5%	250	FK26C0G2E472J	
C0G	5600pF	±5%	250	FK26C0G2E562J	
C0G	6800pF	±5%	250	FK26C0G2E682J	
C0G	8200pF	±5%	250	FK26C0G2E822J	
C0G	100pF	±5%	630	FK26C0G2J101J	
C0G	120pF	±5%	630	FK26C0G2J121J	
C0G	150pF	±5%	630	FK26C0G2J151J	
C0G	180pF	±5%	630	FK26C0G2J181J	
C0G	220pF	±5%	630	FK26C0G2J221J	
C0G	270pF	±5%	630	FK26C0G2J271J	
C0G	330pF	±5%	630	FK26C0G2J331J	
C0G	390pF	±5%	630	FK26C0G2J391J	
C0G	470pF	±5%	630	FK26C0G2J471J	
C0G	560pF	±5%	630	FK26C0G2J561J	
C0G	680pF	±5%	630	FK26C0G2J681J	
C0G	820pF	±5%	630	FK26C0G2J821J	
C0G	1000pF	±5%	630	FK26C0G2J102J	
C0G	1200pF	±5%	630	FK26C0G2J122J	
C0G	1500pF	±5%	630	FK26C0G2J152J	
C0G	1800pF	±5%	630	FK26C0G2J182J	
C0G	2200pF	±5%	630	FK26C0G2J222J	
C0G	2700pF	±5%	630	FK26C0G2J272J	
C0G	3300pF	±5%	630	FK26C0G2J332J	

FK20 AND FK11 TYPES
SHAPES AND DIMENSIONS

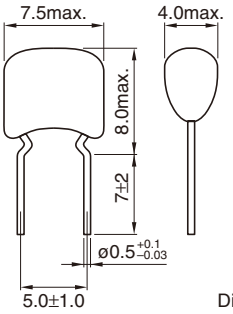


Dimensions in mm

RATED VOLTAGE Edc: 100 to 630V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK20 type	FK11 type
C0G	15000pF	±5%	100	FK20C0G2A153J	FK11C0G2A153J
C0G	22000pF	±5%	100	FK20C0G2A223J	FK11C0G2A223J
C0G	33000pF	±5%	100	FK20C0G2A333J	FK11C0G2A333J
C0G	47000pF	±5%	100	FK20C0G2A473J	FK11C0G2A473J
C0G	10000pF	±5%	250	FK20C0G2E103J	
C0G	15000pF	±5%	250	FK20C0G2E153J	
C0G	3900pF	±5%	630	FK20C0G2J392J	
C0G	4700pF	±5%	630	FK20C0G2J472J	
C0G	5600pF	±5%	630	FK20C0G2J562J	
C0G	6800pF	±5%	630	FK20C0G2J682J	

FK22 TYPE
SHAPES AND DIMENSIONS



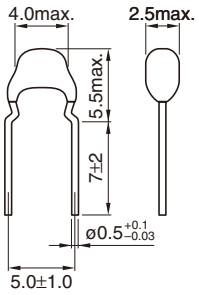
Dimensions in mm

RATED VOLTAGE Edc: 100 to 630V

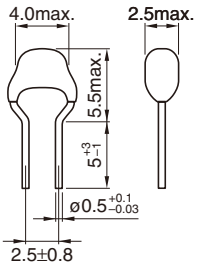
Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.
				FK22 type
C0G	68000pF	±5%	100	FK22C0G2A683J
C0G	0.1µF	±5%	100	FK22C0G2A104J
C0G	22000pF	±5%	250	FK22C0G2E223J
C0G	33000pF	±5%	250	FK22C0G2E333J
C0G	47000pF	±5%	250	FK22C0G2E473J
C0G	8200pF	±5%	630	FK22C0G2J822J
C0G	10000pF	±5%	630	FK22C0G2J103J
C0G	15000pF	±5%	630	FK22C0G2J153J
C0G	22000pF	±5%	630	FK22C0G2J223J

CAPACITANCE RANGES: CLASS 2 (TEMPERATURE STABLE)
FK28 AND FK18 TYPES
SHAPES AND DIMENSIONS

FK28



FK18

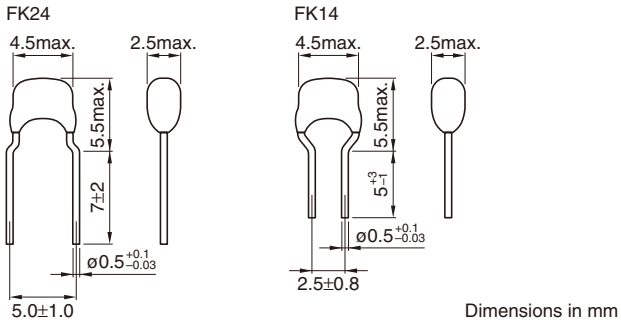


Dimensions in mm

RATED VOLTAGE Edc: 100 to 250V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK28 type	FK18 type
X7R	1000pF	±10%	100	FK28X7R2A102K	FK18X7R2A102K
X7R	1500pF	±10%	100	FK28X7R2A152K	FK18X7R2A152K
X7R	2200pF	±10%	100	FK28X7R2A222K	FK18X7R2A222K
X7R	3300pF	±10%	100	FK28X7R2A332K	FK18X7R2A332K
X7R	4700pF	±10%	100	FK28X7R2A472K	FK18X7R2A472K
X7R	6800pF	±10%	100	FK28X7R2A682K	FK18X7R2A682K
X7R	10000pF	±10%	100	FK28X7R2A103K	FK18X7R2A103K
X7R	15000pF	±10%	100	FK28X7R2A153K	FK18X7R2A153K
X7R	22000pF	±10%	100	FK28X7R2A223K	FK18X7R2A223K
X7S	33000pF	±10%	100	FK28X7S2A333K	FK18X7S2A333K
X7S	47000pF	±10%	100	FK28X7S2A473K	FK18X7S2A473K
X7S	68000pF	±10%	100	FK28X7S2A683K	FK18X7S2A683K
X7S	0.1µF	±10%	100	FK28X7S2A104K	FK18X7S2A104K

FK24 AND FK14 TYPES
SHAPES AND DIMENSIONS

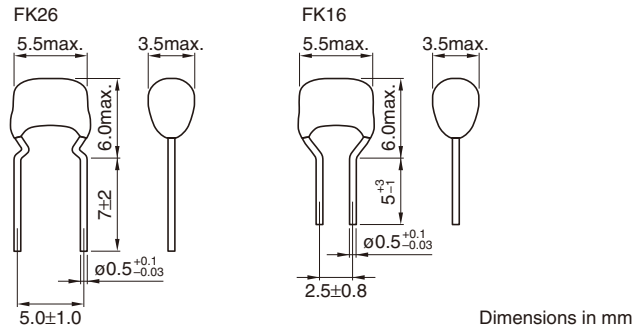


Dimensions in mm

RATED VOLTAGE Edc: 100 to 250V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK24 type	FK14 type
X7R	1000pF	±10%	100	FK24X7R2A102K	FK14X7R2A102K
X7R	1500pF	±10%	100	FK24X7R2A152K	FK14X7R2A152K
X7R	2200pF	±10%	100	FK24X7R2A222K	FK14X7R2A222K
X7R	3300pF	±10%	100	FK24X7R2A332K	FK14X7R2A332K
X7R	4700pF	±10%	100	FK24X7R2A472K	FK14X7R2A472K
X7R	6800pF	±10%	100	FK24X7R2A682K	FK14X7R2A682K
X7R	10000pF	±10%	100	FK24X7R2A103K	FK14X7R2A103K
X7R	15000pF	±10%	100	FK24X7R2A153K	FK14X7R2A153K
X7R	22000pF	±10%	100	FK24X7R2A223K	FK14X7R2A223K
X7R	33000pF	±10%	100	FK24X7R2A333K	FK14X7R2A333K
X7R	47000pF	±10%	100	FK24X7R2A473K	FK14X7R2A473K
X7R	68000pF	±10%	100	FK24X7R2A683K	FK14X7R2A683K
X7R	0.1µF	±10%	100	FK24X7R2A104K	FK14X7R2A104K
X7S	0.15µF	±10%	100	FK24X7S2A154K	FK14X7S2A154K
X7S	0.22µF	±10%	100	FK24X7S2A224K	FK14X7S2A224K
X7S	0.33µF	±10%	100	FK24X7S2A334K	FK14X7S2A334K
X7S	0.47µF	±10%	100	FK24X7S2A474K	FK14X7S2A474K
X7S	0.68µF	±10%	100	FK24X7S2A684K	FK14X7S2A684K
X7S	1µF	±10%	100	FK24X7S2A105K	FK14X7S2A105K
X7R	1000pF	±10%	250	FK24X7R2E102K	FK14X7R2E102K
X7R	1500pF	±10%	250	FK24X7R2E152K	FK14X7R2E152K
X7R	2200pF	±10%	250	FK24X7R2E222K	FK14X7R2E222K
X7R	3300pF	±10%	250	FK24X7R2E332K	FK14X7R2E332K
X7R	4700pF	±10%	250	FK24X7R2E472K	FK14X7R2E472K
X7R	6800pF	±10%	250	FK24X7R2E682K	FK14X7R2E682K
X7R	10000pF	±10%	250	FK24X7R2E103K	FK14X7R2E103K
X7R	15000pF	±10%	250	FK24X7R2E153K	FK14X7R2E153K
X7R	22000pF	±10%	250	FK24X7R2E223K	FK14X7R2E223K

FK26 AND FK16 TYPES
SHAPES AND DIMENSIONS

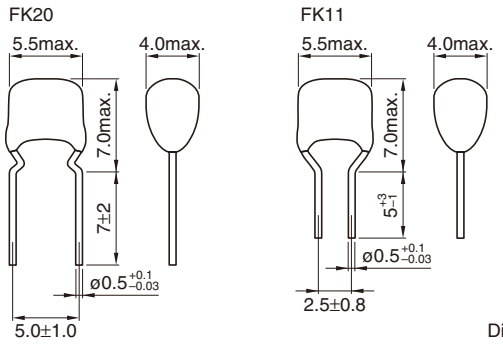


Dimensions in mm

RATED VOLTAGE Edc: 100 to 630V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No.	
				FK26 type	FK16 type
X7R	33000pF	±10%	100	FK26X7R2A333K	FK16X7R2A333K
X7R	47000pF	±10%	100	FK26X7R2A473K	FK16X7R2A473K
X7R	68000pF	±10%	100	FK26X7R2A683K	FK16X7R2A683K
X7R	0.1µF	±10%	100	FK26X7R2A104K	FK16X7R2A104K
X7R	0.15µF	±10%	100	FK26X7R2A154K	FK16X7R2A154K
X7R	0.22µF	±10%	100	FK26X7R2A224K	FK16X7R2A224K
X7R	0.33µF	±10%	100	FK26X7R2A334K	FK16X7R2A334K
X7R	0.47µF	±10%	100	FK26X7R2A474K	FK16X7R2A474K
X7R	0.68µF	±10%	100	FK26X7R2A684K	FK16X7R2A684K
X7R	1µF	±10%	100	FK26X7R2A105K	FK16X7R2A105K
X7S	1.5µF	±10%	100	FK26X7S2A155K	FK16X7S2A155K
X7S	2.2µF	±10%	100	FK26X7S2A225K	FK16X7S2A225K
X7R	15000pF	±10%	250	FK26X7R2E153K	
X7R	22000pF	±10%	250	FK26X7R2E223K	
X7R	33000pF	±10%	250	FK26X7R2E333K	
X7R	47000pF	±10%	250	FK26X7R2E473K	
X7R	68000pF	±10%	250	FK26X7R2E683K	
X7R	0.1µF	±10%	250	FK26X7R2E104K	
X7R	1000pF	±10%	630	FK26X7R2J102K	
X7R	1500pF	±10%	630	FK26X7R2J152K	
X7R	2200pF	±10%	630	FK26X7R2J222K	
X7R	3300pF	±10%	630	FK26X7R2J332K	
X7R	4700pF	±10%	630	FK26X7R2J472K	
X7R	6800pF	±10%	630	FK26X7R2J682K	
X7R	10000pF	±10%	630	FK26X7R2J103K	
X7R	15000pF	±10%	630	FK26X7R2J153K	
X7R	22000pF	±10%	630	FK26X7R2J223K	
X7R	33000pF	±10%	630	FK26X7R2J333K	

FK20 AND FK11 TYPES
SHAPES AND DIMENSIONS

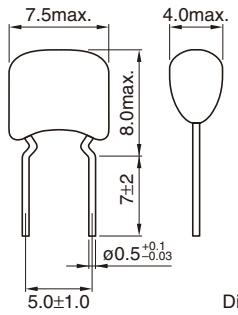


Dimensions in mm

RATED VOLTAGE Edc: 100 to 630V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK20 type	Part No. FK11 type
X7R	0.33µF	±10%	100	FK20X7R2A334K	FK11X7R2A334K
X7R	0.47µF	±10%	100	FK20X7R2A474K	FK11X7R2A474K
X7R	0.68µF	±10%	100	FK20X7R2A684K	FK11X7R2A684K
X7R	1µF	±10%	100	FK20X7R2A105K	FK11X7R2A105K
X7R	1.5µF	±10%	100	FK20X7R2A155K	FK11X7R2A155K
X7R	2.2µF	±10%	100	FK20X7R2A225K	FK11X7R2A225K
X7S	3.3µF	±10%	100	FK20X7S2A335K	FK11X7S2A335K
X7S	4.7µF	±10%	100	FK20X7S2A475K	FK11X7S2A475K
X7R	0.1µF	±10%	250	FK20X7R2E104K	
X7R	0.15µF	±10%	250	FK20X7R2E154K	
X7R	0.22µF	±10%	250	FK20X7R2E224K	
X7R	47000pF	±10%	630	FK20X7R2J473K	
X7R	68000pF	±10%	630	FK20X7R2J683K	

FK22 TYPE
SHAPES AND DIMENSIONS



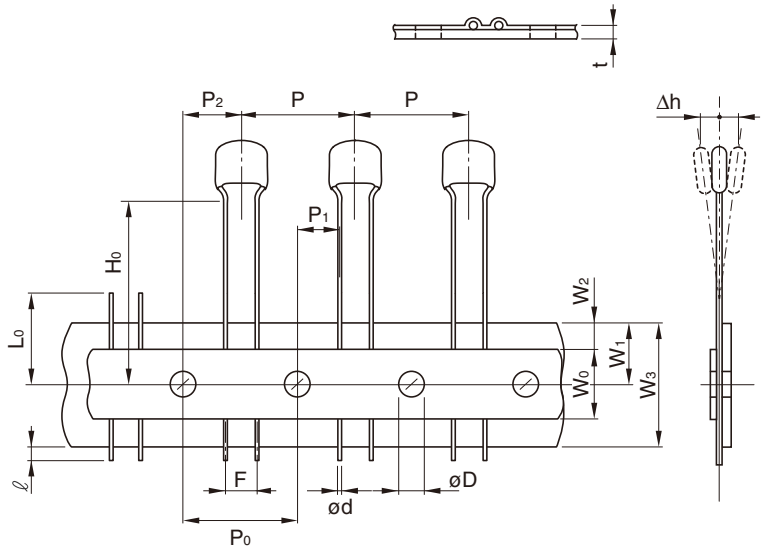
Dimensions in mm

RATED VOLTAGE Edc: 100 to 630V

Temperature characteristics	Capacitance	Tolerance	Rated voltage Edc(V)	Part No. FK22 type
X7R	0.68µF	±10%	100	FK22X7R2A684K
X7R	1µF	±10%	100	FK22X7R2A105K
X7R	1.5µF	±10%	100	FK22X7R2A155K
X7R	2.2µF	±10%	100	FK22X7R2A225K
X7R	0.15µF	±10%	250	FK22X7R2E154K
X7R	0.22µF	±10%	250	FK22X7R2E224K
X7R	0.33µF	±10%	250	FK22X7R2E334K
X7R	0.47µF	±10%	250	FK22X7R2E474K
X7R	0.1µF	±10%	630	FK22X7R2J104K

• For more information about products with other capacitance or other data, please contact us.

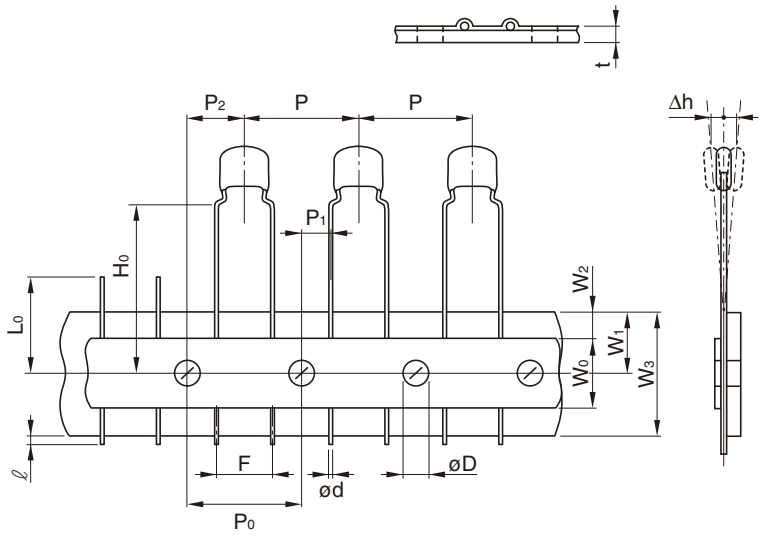
PACKAGING STYLES
TAPING DIMENSIONS
FK1 Series
(FK18, FK14, FK16, FK11 Types)



Symbol	Dimensions (mm)
P	12.7±1.0
P_0*1	12.7±0.3
P_1	5.1±0.7
P_2	6.35±1.3
W_0	12.0±1.0
W_1	9.0±0.5
W_2*2	3.0max.
W_3	18.0+1.0, –0.5
H_0	16.0±0.5
ℓ	1.0max.
t	0.6±0.2
L_0*3	11.0max.
F	2.5+0.5, –0.2
ød	ø0.5+0.1, –0.03
øD	ø4.0±0.2
Δh	0±2

*1 Accumulated pitch tolerance shall be ±2mm for 20 pitches.
*2 Adhesive tape shall not stick out from carrier tape.
*3 The number of consecutive gaps in the product shall be three or less.

FK2 Series
(FK28, FK24, FK26, FK20, FK22 Types)



Symbol	Dimensions (mm)
P	12.7±1.0
P_0*1	12.7±0.3
P_1	3.85±0.7
P_2	6.35±1.3
W_0	12.0±1.0
W_1	9.0±0.5
W_2*2	3.0max.
W_3	18.0+1.0, –0.5
H_0	16.0±0.5
ℓ	1.0max.
t	0.6±0.2
L_0*3	11.0max.
F	5.0+0.8, –0.2
ød	ø0.5+0.1, –0.03
øD	ø4.0±0.2
Δh	0±2

*1 Accumulated pitch tolerance shall be ±2mm for 20 pitches.
*2 Adhesive tape shall not stick out from carrier tape.
*3 The number of consecutive gaps in the product shall be three or less.

PACKAGING QUANTITIES

Type	Quantity
FK28, FK18 FK24, FK14 FK26, FK16	2000 pieces/1box
FK20, FK11 FK22	1500 pieces/1box