

PRODUCT CODE - SMD ALUMINUM ELECTROLYTIC CAPACITORS



SMD type example:

DV series ▪ 220µF ▪ 50V ▪ ±20% ▪ Ø 10mm ▪ L 10.5mm ▪ Tape & Reel ▪ AEC-Q200

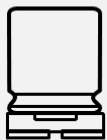
| | | | | | | | | | | | | | | | | | | | |
|------------|---|--------------|---|---|-----------------------|--------------|---|---|-------------|--------------|----|----|--------------|------------|-----------------|---------------------|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| D V | | 2 2 1 | | | M | 0 5 0 | | | G | 1 0 5 | | | E | T R | | X - - - | | | |
| Series | | Capacitance | | | Capacitance tolerance | Voltage | | | Case Ø (mm) | Height (mm) | | | Type code | Taping | | Special requirement | | | |
| Code | | µF | | | Code | Code | | | Code | Code | | | Code | Code | | Code | | | |
| OR1 | | 0.1 | | | H | 004 | | | A | 055 | | | E | TR | | U | | | |
| R47 | | 0.47 | | | K | 6R3 | | | B | 061 | | | Tape on reel | | W | | | | |
| 010 | | 1 | | | S | 010 | | | C | 065 | | | Standard | | X | | | | |
| 4R7 | | 4.7 | | | M | 016 | | | E | 070 | | | | | Special | | | | |
| 100 | | 10 | | | N | 025 | | | F | 077 | | | | | Plastic reel | | | | |
| 101 | | 100 | | | D | 035 | | | G | 087 | | | | | Vibration proof | | | | |
| 102 | | 1000 | | | I | 050 | | | Z | 105 | | | | | AEC-Q200 | | | | |
| 682 | | 6800 | | | B | 063 | | | J | 140 | | | | | | | | | |
| | | | | | G | 080 | | | K | 165 | | | | | | | | | |
| | | | | | Z | 100 | | | | | | | | | | | | | |
| | | | | | Y | 160 | | | | | | | | | | | | | |
| | | | | | X | 200 | | | | | | | | | | | | | |
| | | | | | A | 250 | | | | | | | | | | | | | |
| | | | | | J | 400 | | | | | | | | | | | | | |
| | | | | | C | 450 | | | | | | | | | | | | | |
| | | | | | E | | | | | | | | | | | | | | |
| | | | | | V | | | | | | | | | | | | | | |
| | | | | | Q | | | | | | | | | | | | | | |
| | | | | | T | | | | | | | | | | | | | | |
| | | | | | W | | | | | | | | | | | | | | |
| | | | | | P | | | | | | | | | | | | | | |
| | | | | | L | | | | | | | | | | | | | | |
| | | | | | U | | | | | | | | | | | | | | |
| | | | | | F | | | | | | | | | | | | | | |
| | | | | | O | | | | | | | | | | | | | | |

See datasheet for reference

Please consult CapXon for further assistance

MARKING - SMD ALUMINUM ELECTROLYTIC CAPACITORS

Aluminum Electrolytic Capacitor - SMD type

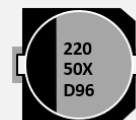


220: Nominal capacitance (µF)
 50V: Rated voltage (V) ▪ Standard type
 50X: Rated voltage (V) ▪ AEC-Q200 type
 (-) polarity (Cathode indicate)
 D: DV Series
 96: Production datacode year/month (ex. 2019/June)

Top view
Standard type

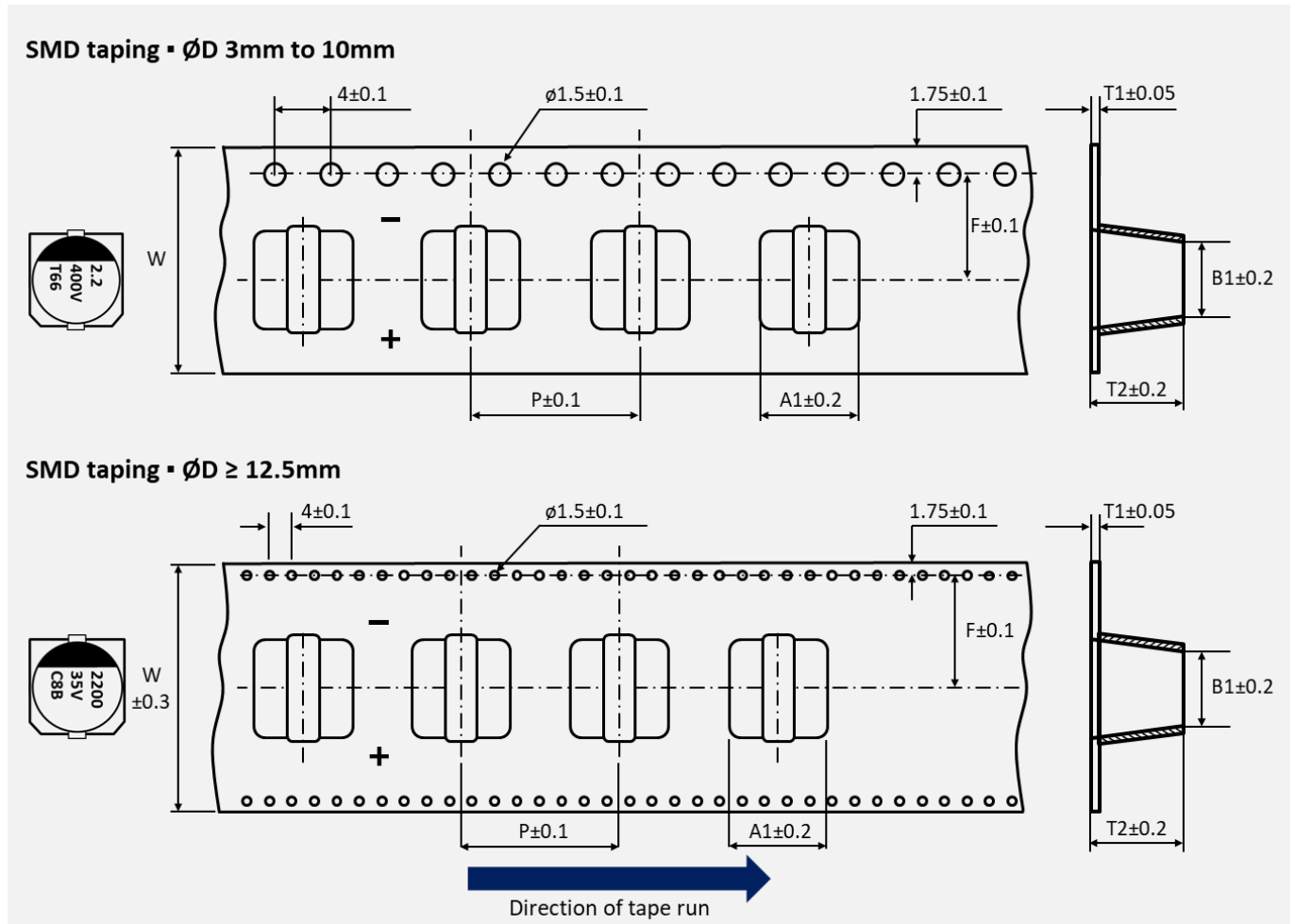


Top view
AEC-Q200 type



| Digits | Description |
|-----------------|---|
| 1 st | Last digit of the year |
| 2 nd | Month 1, 2, 3...9, A (10), B (11), C (12) |

TAPING • SMD ALUMINUM ELECTROLYTIC CAPACITORS • REEL PACK

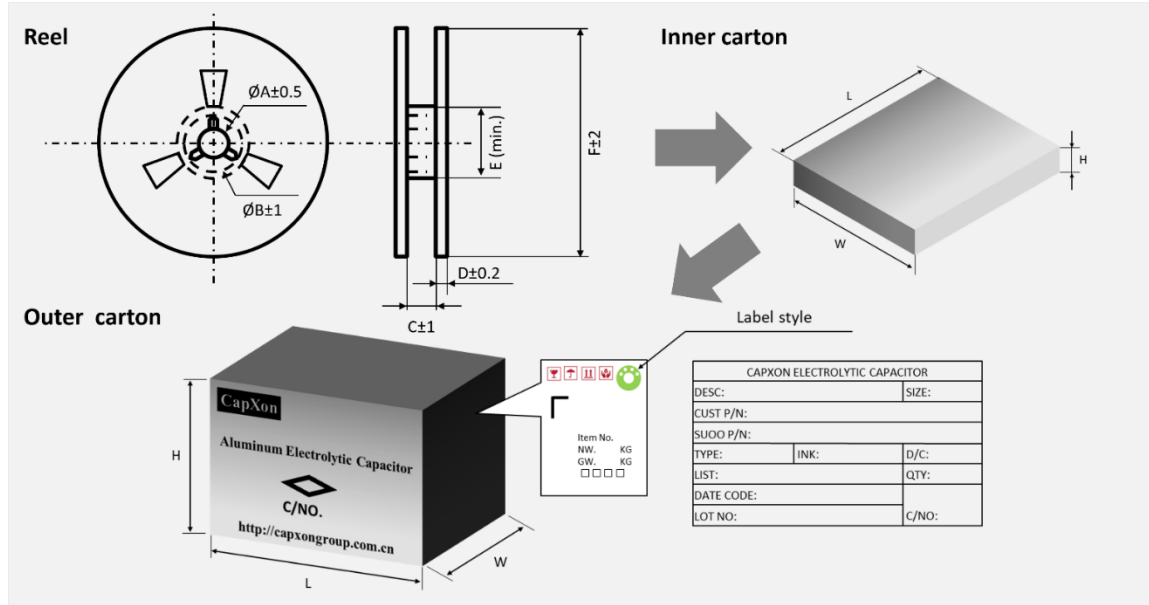


All dimensions in mm

| $\phi D \times L$ | 3 x 5.5 | 4 x 5.5 | 5 x 5.5 | 5 x 7 | 6.3 x 5.5 | 6.3 x 6.1 | 6.3 x 7 | 6.3 x 7.7 | 6.3 x 8.7 |
|-------------------|---------|---------|---------|-------|-----------|-----------|---------|-----------|-----------|
| W | 12 | 12 | 12 | 12 | 16 | 16 | 16 | 16 | 16 |
| P | 8 | 8 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| F | 5.5 | 5.5 | 5.5 | 5.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 |
| A1 | 3.5 | 4.7 | 5.7 | 5.7 | 7 | 7 | 7 | 7 | 7 |
| B1 | 3.5 | 4.7 | 5.7 | 5.7 | 7 | 7 | 7 | 7 | 7 |
| T1 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| T2 | 5.7 | 5.7 | 5.7 | 7.5 | 5.7 | 6.2 | 8.1 | 8.1 | 9.3 |

| $\phi D \times L$ | 8 x 6.5 | 8 x 10.5 | 10 x 10.5 | 12.5 x 14 | 12.5 x 16 | 16 x 17 | 16 x 21.5 | 18 x 16.5 | 18 x 21.5 |
|-------------------|---------|----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|
| W | 16 | 24 | 24 | 32 | 32 | 44 | 44 | 44 | 44 |
| P | 12 | 16 | 16 | 24 | 24 | 28 | 32 | 32 | 32 |
| F | 7.5 | 11.5 | 11.5 | 14.2 | 14.2 | 20.2 | 20.2 | 20.2 | 20.2 |
| A1 | 8.7 | 8.7 | 10.7 | 13.9 | 13.4 | 17.5 | 17.5 | 19.5 | 19.5 |
| B1 | 8.7 | 8.7 | 10.7 | 13.9 | 13.4 | 17.5 | 17.5 | 19.5 | 19.5 |
| T1 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| T2 | 7 | 11 | 11 | 14.5 | 17 | 17.5 | 23 | 17.5 | 23 |

TAPING • SMD ALUMINUM ELECTROLYTIC CAPACITORS • REEL PACK • PAPER REEL



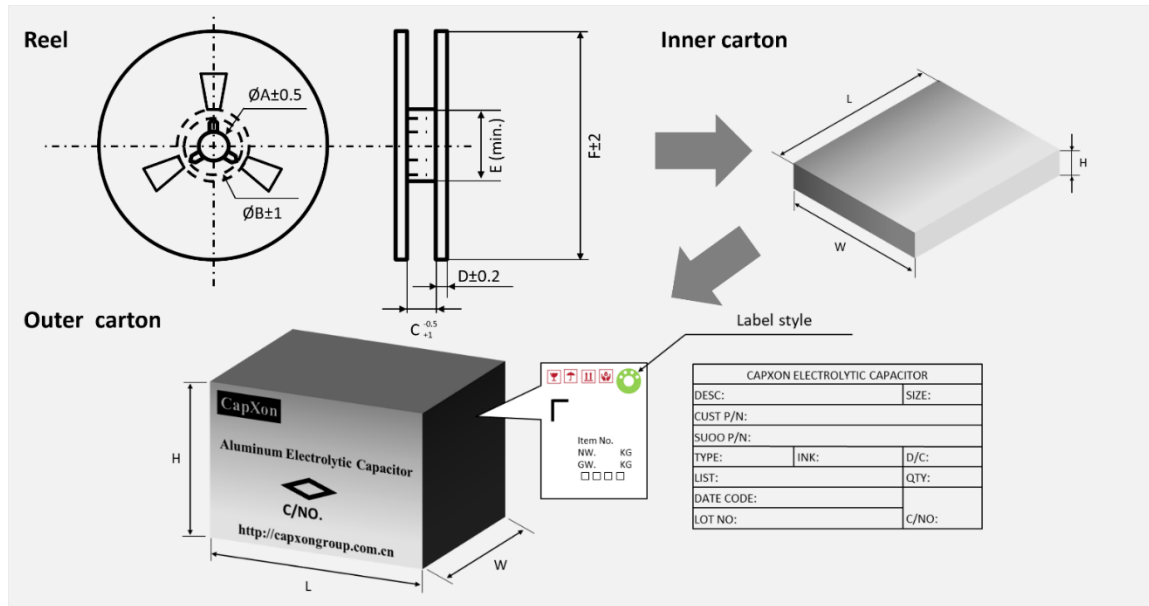
| Ø D (mm) | L (mm) | Reel quantity (pcs) | Inner box quantity (pcs) | Inner box size L x W x H (mm) | Outer box quantity (pcs) | Outer box size L x W x H (mm) | Country of origin | Tariff number |
|----------|--------|---------------------|--------------------------|-------------------------------|--------------------------|-------------------------------|-------------------|---------------|
| 3 | 5.5 | 2000 | 10000 | 400 x 390 x 106 | 30000 | 425 x 412 x 340 | China | 85322200 |
| 4 | 5.5 | 2000 | 10000 | 400 x 390 x 106 | 30000 | 425 x 412 x 340 | China | 85322200 |
| 5 | 5.5 | 1000 | 5000 | 400 x 390 x 106 | 15000 | 425 x 412 x 340 | China | 85322200 |
| | 7 | 1000 | 5000 | 400 x 390 x 106 | 15000 | 425 x 412 x 340 | China | 85322200 |
| 6.3 | 5.5 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 6.1 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 7 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 7.7 | 900 | 3600 | 400 x 390 x 106 | 10800 | 425 x 412 x 340 | China | 85322200 |
| 8 | 8.7 | 800 | 3200 | 400 x 390 x 106 | 9600 | 425 x 412 x 340 | China | 85322200 |
| | 6.5 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| 10 | 10.5 | 500 | 1500 | 400 x 390 x 106 | 4500 | 425 x 412 x 340 | China | 85322200 |
| | 10.5 | 500 | 1500 | 400 x 390 x 106 | 4500 | 425 x 412 x 340 | China | 85322200 |
| 12.5 | 14 | 200 | 600 | 400 x 390 x 130 | 1800 | 430 x 420 x 422 | China | 85322200 |
| | 16 | 200 | 600 | 400 x 390 x 130 | 1800 | 430 x 420 x 422 | China | 85322200 |
| 16 | 17 | 125 | 250 | 400 x 390 x 106 | 750 | 425 x 412 x 340 | China | 85322200 |
| | 21.5 | 100 | 200 | 400 x 390 x 106 | 600 | 425 x 412 x 340 | China | 85322200 |
| 18 | 16.5 | 125 | 250 | 400 x 390 x 106 | 750 | 425 x 412 x 340 | China | 85322200 |
| | 21.5 | 100 | 200 | 400 x 390 x 106 | 600 | 425 x 412 x 340 | China | 85322200 |

All reel dimensions in mm

| Ø D | 3 | 4 | 5 | 5 | 5 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12.5 | 12.5 | 16 | 16 | 18 | 18 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|------|------|------|------|------|-----|------|------|------|
| L | 5.5 | 5.5 | 5.5 | 5.8 | 7 | 5.5 | 5.8 | 6.1 | 7 | 7.7 | 8.7 | 6.5 | 7.7 | 10.5 | 11.7 | 8.7 | 10.5 | 12.4 | 16.5 | 14 | 16 | 17 | 21.5 | 16.5 | 21.5 |
| A | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| B | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| C | 14 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 26 | 26 | 26 | 26 | 26 | 26 | 34 | 34 | 46 | 46 | 46 | 46 |
| D | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| E | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| F | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |

Remark: Standard = Paper reel

TAPING • SMD ALUMINUM ELECTROLYTIC CAPACITORS • REEL PACK • PLASTIC REEL



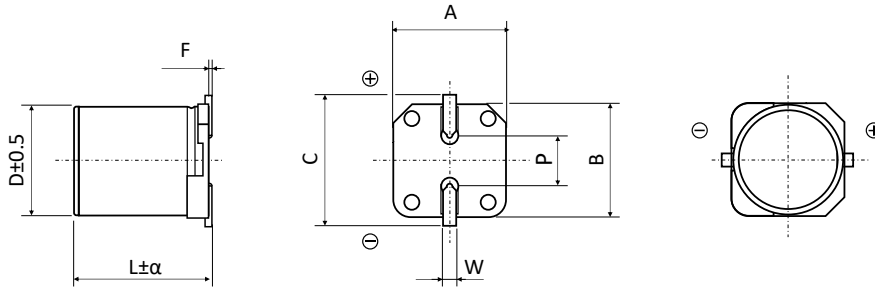
| Ø D (mm) | L (mm) | Reel quantity (pcs) | Inner box quantity (pcs) | Inner box size L x W x H (mm) | Outer box quantity (pcs) | Outer box size L x W x H (mm) | Country of origin | Tariff number |
|----------|--------|---------------------|--------------------------|-------------------------------|--------------------------|-------------------------------|-------------------|---------------|
| 3 | 5.5 | 2000 | 10000 | 400 x 390 x 106 | 30000 | 425 x 412 x 340 | China | 85322200 |
| 4 | 5.5 | 2000 | 10000 | 400 x 390 x 106 | 30000 | 425 x 412 x 340 | China | 85322200 |
| 5 | 5.5 | 1000 | 5000 | 400 x 390 x 106 | 15000 | 425 x 412 x 340 | China | 85322200 |
| | 7 | 1000 | 5000 | 400 x 390 x 106 | 15000 | 425 x 412 x 340 | China | 85322200 |
| 6.3 | 5.5 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 6.1 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 7 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 7.7 | 900 | 3600 | 400 x 390 x 106 | 10800 | 425 x 412 x 340 | China | 85322200 |
| | 8.7 | 800 | 3200 | 400 x 390 x 106 | 9600 | 425 x 412 x 340 | China | 85322200 |
| 8 | 6.5 | 1000 | 4000 | 400 x 390 x 106 | 12000 | 425 x 412 x 340 | China | 85322200 |
| | 10.5 | 500 | 1500 | 400 x 390 x 106 | 4500 | 425 x 412 x 340 | China | 85322200 |
| 10 | 10.5 | 500 | 1500 | 400 x 390 x 106 | 4500 | 425 x 412 x 340 | China | 85322200 |
| 12.5 | 14 | 200 | 600 | 400 x 390 x 130 | 1800 | 430 x 420 x 422 | China | 85322200 |
| | 16 | 200 | 600 | 400 x 390 x 130 | 1800 | 430 x 420 x 422 | China | 85322200 |
| 16 | 17 | 125 | 250 | 400 x 390 x 106 | 750 | 425 x 412 x 340 | China | 85322200 |
| | 21.5 | 100 | 200 | 400 x 390 x 106 | 600 | 425 x 412 x 340 | China | 85322200 |
| 18 | 16.5 | 125 | 250 | 400 x 390 x 106 | 750 | 425 x 412 x 340 | China | 85322200 |
| | 21.5 | 100 | 200 | 400 x 390 x 106 | 600 | 425 x 412 x 340 | China | 85322200 |

All reel dimensions in mm

| Ø D | 3 | 4 | 5 | 5 | 5 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12.5 | 12.5 | 16 | 16 | 18 | 18 |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L | 5.5 | 5.5 | 5.5 | 5.8 | 7 | 5.5 | 5.8 | 6.1 | 7 | 7.7 | 8.7 | 6.5 | 7.7 | 10.5 | 11.7 | 8.7 | 10.5 | 12.4 | 16.5 | 14 | 16 | 17 | 21.5 | 16.5 | 21.5 |
| A | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 15 | 13.2 | 13.2 | 13.2 | 13.2 |
| B | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21 | 21.5 | 21.5 | 21.5 | 21.5 |
| C | 14 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 26 | 26 | 26 | 26 | 26 | 26 | 34 | 34 | 46 | 46 | 46 | 46 |
| D | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 3 | 1.5 | 1.5 | 1.5 | 1.5 |
| E | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 100 | 100 | 100 | 100 |
| F | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |

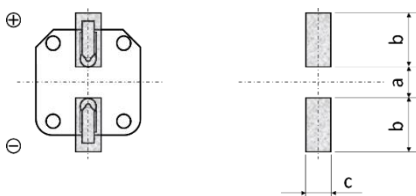
Remark: Plastic reel = Add code "U" at the end of the part number

DIMENSIONS STANDARD PACKAGE - All dimensions in mm

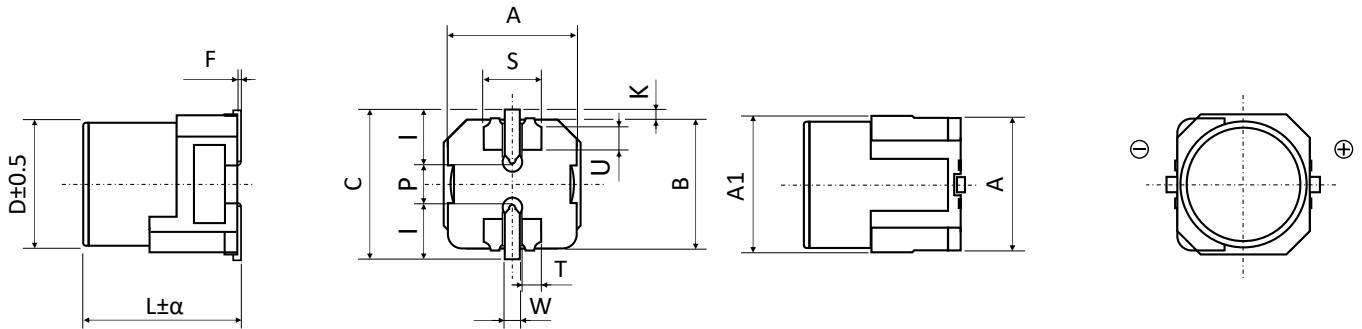


| ϕD | L | α | $A \pm 0.2$ | $B \pm 0.2$ | $C \pm 0.2$ | F | $P \pm 0.2$ | W |
|----------|------|----------|-------------|-------------|-------------|----------|-------------|------------|
| 3.0 | 5.5 | Max | 3.3 | 3.3 | 3.9 | 0 to 0.3 | 1.0 | 0.4 to 0.6 |
| 4.0 | 5.5 | Max | 4.3 | 4.3 | 4.9 | 0 to 0.3 | 1.0 | 0.5 to 0.8 |
| 5.0 | 5.5 | Max | 5.3 | 5.3 | 5.9 | 0 to 0.3 | 1.4 | 0.5 to 0.8 |
| 5.0 | 7.0 | 0.3 | 5.3 | 5.3 | 5.9 | 0 to 0.3 | 1.4 | 0.5 to 0.8 |
| 6.3 | 5.5 | 0.2 | 6.6 | 6.6 | 7.2 | 0 to 0.3 | 2.2 | 0.5 to 0.8 |
| 6.3 | 6.1 | Max | 6.6 | 6.6 | 7.2 | 0 to 0.3 | 2.2 | 0.5 to 0.8 |
| 6.3 | 7.0 | 0.3 | 6.6 | 6.6 | 7.2 | 0 to 0.3 | 2.2 | 0.5 to 0.8 |
| 6.3 | 7.7 | Max | 6.6 | 6.6 | 7.2 | 0 to 0.3 | 2.2 | 0.5 to 0.8 |
| 6.3 | 8.7 | 0.3 | 6.6 | 6.6 | 7.2 | 0 to 0.3 | 2.2 | 0.5 to 0.8 |
| 8.0 | 6.5 | Max | 8.3 | 8.3 | 9.0 | 0 to 0.3 | 2.3 | 0.5 to 0.8 |
| 8.0 | 10.5 | Max | 8.3 | 8.3 | 9.0 | 0 to 0.3 | 3.1 | 0.7 to 1.1 |
| 10.0 | 10.5 | Max | 10.3 | 10.3 | 11.0 | 0 to 0.3 | 4.5 | 0.7 to 1.1 |
| 12.5 | 14.0 | Max | 13.0 | 13.0 | 13.9 | 0 to 0.3 | 4.5 | 1.0 to 1.4 |
| 12.5 | 16.0 | 0.5 | 13.0 | 13.0 | 13.9 | 0 to 0.3 | 4.5 | 1.0 to 1.4 |
| 16.0 | 17.0 | 0.5 | 17.0 | 17.0 | 18.0 | 0 to 0.3 | 6.6 | 1.0 to 1.4 |
| 16.0 | 21.5 | 0.5 | 17.0 | 17.0 | 18.0 | 0 to 0.3 | 6.6 | 1.0 to 1.4 |
| 18.0 | 16.5 | 0.5 | 19.0 | 19.0 | 20.0 | 0 to 0.3 | 6.6 | 1.0 to 1.4 |
| 18.0 | 21.5 | 0.5 | 19.0 | 19.0 | 20.0 | 0 to 0.3 | 6.6 | 1.0 to 1.4 |

PAD LAYOUT STANDARD PACKAGE - All dimensions in mm

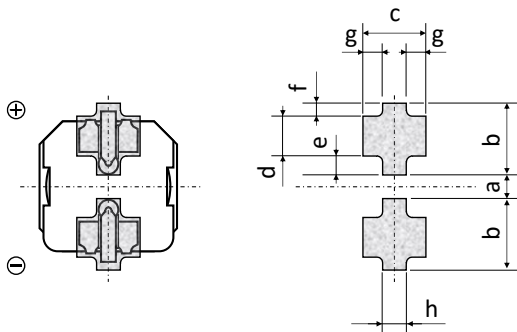


| ϕD | L | a | b | c |
|----------|------|-----|-----|-----|
| 3.0 | 5.5 | 0.8 | 2.2 | 1.6 |
| 4.0 | 5.5 | 1.0 | 2.6 | 1.6 |
| 5.0 | 5.5 | 1.4 | 3.0 | 1.6 |
| 5.0 | 7.0 | 1.4 | 3.0 | 1.6 |
| 6.3 | 5.5 | 2.1 | 3.5 | 1.6 |
| 6.3 | 6.1 | 2.1 | 3.5 | 1.6 |
| 6.3 | 7.0 | 2.1 | 3.5 | 1.6 |
| 6.3 | 7.7 | 2.1 | 3.5 | 1.6 |
| 6.3 | 8.7 | 2.1 | 3.5 | 1.6 |
| 8.0 | 6.5 | 2.1 | 4.5 | 1.6 |
| 8.0 | 10.5 | 2.8 | 4.2 | 1.9 |
| 10.0 | 10.5 | 4.3 | 4.4 | 1.9 |
| 12.5 | 14.0 | 4.3 | 5.8 | 2.5 |
| 12.5 | 16.0 | 4.3 | 5.8 | 2.5 |
| 16.0 | 17.0 | 6.0 | 6.5 | 3.5 |
| 16.0 | 21.5 | 6.0 | 6.5 | 3.5 |
| 18.0 | 16.5 | 6.0 | 7.5 | 3.5 |
| 18.0 | 21.5 | 6.0 | 7.5 | 3.5 |

DIMENSIONS VP PACKAGE (VIBRATION-PROOF) Ø D6.3 ▪ All dimensions in mm


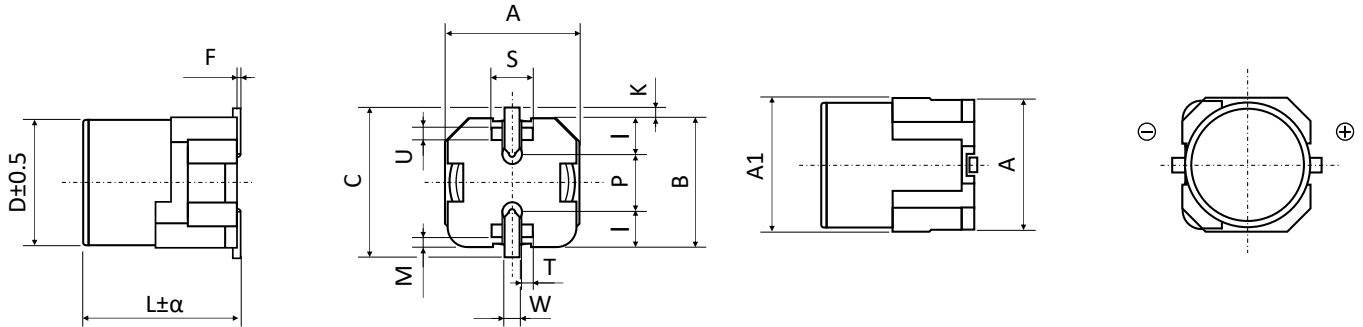
| Ø D | L | α | A ± 0.2 | A1 (max.) | B ± 0.2 | C (max.) | F | K |
|-----|-----|-----|---------|-----------|---------|----------|-----------|-----------------|
| 6.3 | 6.1 | 0.3 | 6.6 | 7.1 | 6.6 | 7.8 | 0 to 0.15 | 0.35 +0.15/-0.2 |
| 6.3 | 8.0 | 0.3 | 6.6 | 7.1 | 6.6 | 7.8 | 0 to 0.15 | 0.35 +0.15/-0.2 |

| Ø D | L | P ± 0.2 | S ± 0.1 | I ± 0.1 | T ± 0.1 | U ± 0.1 | W ± 0.1 |
|-----|-----|---------|---------|---------|---------|---------|---------|
| 6.3 | 6.1 | 2.2 | 2.9 | 2.4 | 1.1 | 1.55 | 0.65 |
| 6.3 | 8.0 | 2.2 | 2.9 | 2.4 | 1.1 | 1.55 | 0.65 |

PAD LAYOUT VP PACKAGE (VIBRATION-PROOF) Ø D6.3 ▪ All dimensions in mm


| Ø D | L | a | b | c | d | e | f | g | h |
|-----|-----|-----|-----|-----|-----|------|------|-----|-----|
| 6.3 | 6.1 | 1.2 | 3.6 | 3.2 | 2.0 | 0.95 | 0.65 | 1.0 | 1.2 |
| 6.3 | 8.0 | 1.2 | 3.6 | 3.2 | 2.0 | 0.95 | 0.65 | 1.0 | 1.2 |

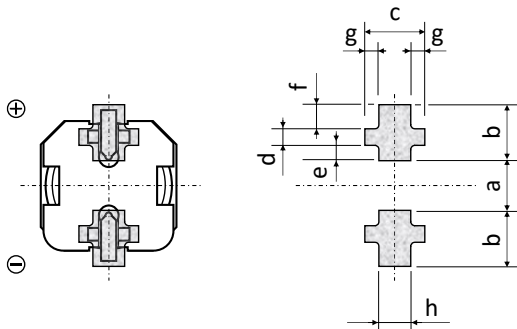
DIMENSIONS VP PACKAGE (VIBRATION-PROOF) Ø D8 and D10 ▪ All dimensions in mm



| Ø D | L | α | A ± 0.2 | A1 (max.) | B ± 0.2 | C (max.) | F | K ± 0.2 |
|------|------|-----|---------|-----------|---------|----------|-----------|---------|
| 8.0 | 10.5 | 0.5 | 8.3 | 8.8 | 8.3 | 10.0 | 0 to 0.15 | 0.7 |
| 10.0 | 10.5 | 0.5 | 10.3 | 10.8 | 10.3 | 12.0 | 0 to 0.15 | 0.7 |
| 10.0 | 12.5 | 0.5 | 10.3 | 10.8 | 10.3 | 12.0 | 0 to 0.15 | 0.7 |
| 10.0 | 13.5 | 0.5 | 10.3 | 10.8 | 10.3 | 12.0 | 0 to 0.15 | 0.7 |

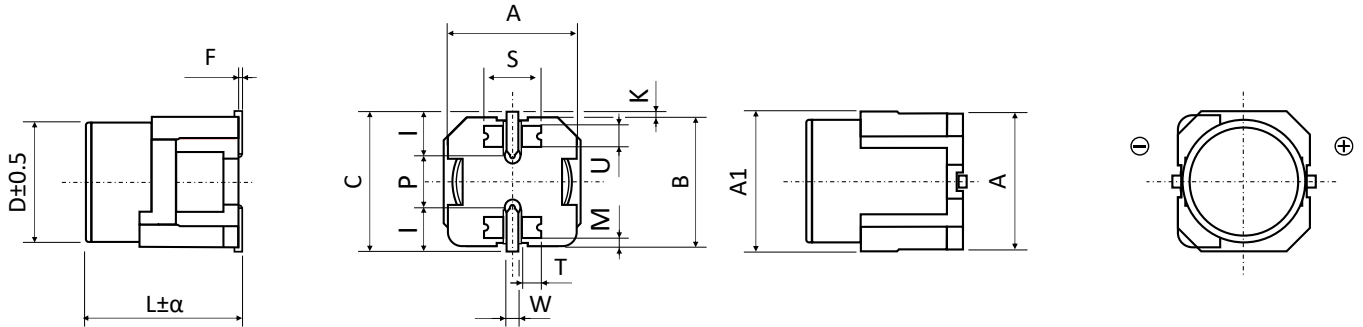
| Ø D | L | P ± 0.2 | S ± 0.1 | I ± 0.1 | T ± 0.1 | U ± 0.1 | W ± 0.1 | M ± 0.1 |
|------|------|---------|---------|---------|---------|---------|---------|---------|
| 8.0 | 10.5 | 3.1 | 3 | 3.4 | 1.4 | 0.7 | 1.2 | 0.7 |
| 10.0 | 10.5 | 4.6 | 3.3 | 3.5 | 1.5 | 0.8 | 1.2 | 0.9 |
| 10.0 | 12.5 | 4.6 | 3.3 | 3.5 | 1.5 | 0.8 | 1.2 | 0.9 |
| 10.0 | 13.5 | 4.6 | 3.3 | 3.5 | 1.5 | 0.8 | 1.2 | 0.9 |

PAD LAYOUT VP PACKAGE (VIBRATION-PROOF) Ø D8 and D10 ▪ All dimensions in mm



| Ø D | L | a | b | c | d | e | f | g | h |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 8.0 | 10.5 | 2.7 | 4.0 | 4.7 | 1.3 | 1.0 | 1.7 | 1.1 | 2.5 |
| 10.0 | 10.5 | 3.9 | 4.4 | 4.7 | 1.3 | 1.2 | 1.9 | 1.1 | 2.5 |
| 10.0 | 12.5 | 3.9 | 4.4 | 4.7 | 1.3 | 1.2 | 1.9 | 1.1 | 2.5 |
| 10.0 | 13.5 | 3.9 | 4.4 | 4.7 | 1.3 | 1.2 | 1.9 | 1.1 | 2.5 |

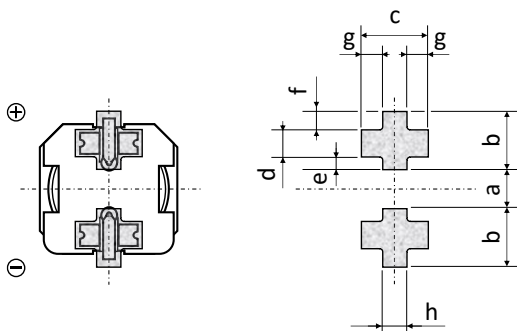
DIMENSIONS VP PACKAGE (VIBRATION-PROOF) Ø D12.5, D16 and D18 ▪ All dimensions in mm



| ø D | L | α | A ± 0.2 | A1 (max.) | B ± 0.2 | C (max.) | F | K ± 0.3 |
|------|------|-----|---------|-----------|---------|----------|-----------|---------|
| 12.5 | 14.0 | 1.0 | 13.5 | 13.5 | 13.5 | 15.0 | 0 to 0.15 | 0.7 |
| 12.5 | 16.0 | 1.0 | 13.5 | 13.5 | 13.5 | 15.0 | 0 to 0.15 | 0.7 |
| 16.0 | 17.0 | 1.0 | 17.0 | 17.0 | 17.0 | 19.0 | 0 to 0.15 | 0.7 |
| 16.0 | 21.5 | 1.0 | 17.0 | 17.0 | 17.0 | 19.0 | 0 to 0.15 | 0.7 |
| 18.0 | 16.5 | 1.0 | 19.0 | 19.0 | 19.0 | 21.0 | 0 to 0.15 | 0.7 |
| 18.0 | 21.5 | 1.0 | 19.0 | 19.0 | 19.0 | 21.0 | 0 to 0.15 | 0.7 |

| ø D | L | P ± 0.2 | S ± 0.1 | I ± 0.1 | T ± 0.1 | U ± 0.1 | W ± 0.1 | M ± 0.1 |
|------|------|---------|---------|---------|---------|---------|---------|---------|
| 12.5 | 14.0 | 4.4 | 6.0 | 4.7 | 2.0 | 2.2 | 1.2 | 0.95 |
| 12.5 | 16.0 | 4.4 | 6.0 | 4.7 | 2.0 | 2.2 | 1.2 | 0.95 |
| 16.0 | 17.0 | 6.7 | 5.8 | 5.5 | 2.0 | 3.0 | 1.4 | 1.0 |
| 16.0 | 21.5 | 6.7 | 5.8 | 5.5 | 2.0 | 3.0 | 1.4 | 1.0 |
| 18.0 | 16.5 | 6.7 | 5.8 | 6.7 | 2.1 | 3.0 | 1.4 | 1.5 |
| 18.0 | 21.5 | 6.7 | 5.8 | 6.7 | 2.1 | 3.0 | 1.4 | 1.5 |

PAD LAYOUT VP PACKAGE (VIBRATION-PROOF) Ø D12.5, D16 and D18 ▪ All dimensions in mm



| ø D | L | a | b | c | d | e | f | g | h |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 12.5 | 14.0 | 3.9 | 6.0 | 6.9 | 2.8 | 1.3 | 1.9 | 2.2 | 2.5 |
| 12.5 | 16.0 | 3.9 | 6.0 | 6.9 | 2.8 | 1.3 | 1.9 | 2.2 | 2.5 |
| 16.0 | 17.0 | 5.8 | 6.8 | 6.2 | 3.6 | 1.3 | 1.9 | 1.7 | 2.8 |
| 16.0 | 21.5 | 5.8 | 6.8 | 6.2 | 3.6 | 1.3 | 1.9 | 1.7 | 2.8 |
| 18.0 | 16.5 | 5.8 | 7.3 | 6.2 | 3.6 | 1.8 | 1.9 | 1.7 | 2.8 |
| 18.0 | 21.5 | 5.8 | 7.3 | 6.2 | 3.6 | 1.8 | 1.9 | 1.7 | 2.8 |