

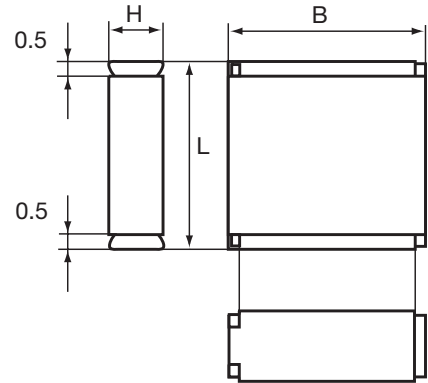
- Metallized polyphenylene sulphide (PPS) SMD
- According to IEC 60384-20

TYPICAL APPLICATIONS

Timing, filtering. Memory capacitor. High stability and accuracy. High temperature use.

CONSTRUCTION

Polyphenylene sulphide (PPS) film capacitor for surface mounting. Encapsulation in self-extinguishing material meeting the requirements of UL 94V-0.



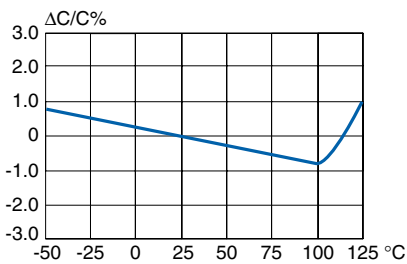
Components may be vertically mounted for decreased footprint. See page 69.

TECHNICAL DATA

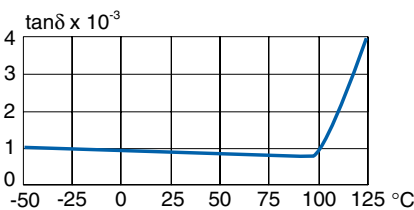
| | | | | | | | | | | | | | |
|--|---|--------------------------------------|--------------------|---------|--|--------------------------|-----------------------|-------------------------|-----------|---------|----------------------|-----------|----------|
| Rated voltage U_R, VDC | 50 | 100 | 250 | 400 | | | | | | | | | |
| Rated voltage U_R, VAC | 30 | 63 | 160 | 200 | | | | | | | | | |
| Capacitance range, nF | 1 - 3300 | 1 - 1500 | 1 - 470 | 1 - 220 | | | | | | | | | |
| Capacitance tolerance | ±5%, ±2.5%, ±2% other tolerances on request. | | | | | | | | | | | | |
| Category temperature range | -55°C to +125°C From +125°C to +150°C, the voltage derating is 2%/°C. | | | | | | | | | | | | |
| Rated temperature | +100°C | | | | | | | | | | | | |
| Voltage derating | The rated voltage is decreased with 1.25%/°C from +100°C. | | | | | | | | | | | | |
| Climatic category | 55/125/56 | | | | | | | | | | | | |
| Voltage proof | 1.6 x U_R , 60s | | | | | | | | | | | | |
| Insulation resistance | Minimum value between terminals Measured at +20°C according to IEC 60384-20. | | | | | | | | | | | | |
| | <table border="1"> <tr> <td></td> <td>$C \leq 0.33\mu\text{F}$</td> <td>$C > 0.33\mu\text{F}$</td> </tr> <tr> <td>$U_R \leq 100\text{ V}$</td> <td>15 000 MΩ</td> <td>5 000 s</td> </tr> <tr> <td>$U_R > 100\text{ V}$</td> <td>30 000 MΩ</td> <td>10 000 s</td> </tr> </table> | | | | | $C \leq 0.33\mu\text{F}$ | $C > 0.33\mu\text{F}$ | $U_R \leq 100\text{ V}$ | 15 000 MΩ | 5 000 s | $U_R > 100\text{ V}$ | 30 000 MΩ | 10 000 s |
| | $C \leq 0.33\mu\text{F}$ | $C > 0.33\mu\text{F}$ | | | | | | | | | | | |
| $U_R \leq 100\text{ V}$ | 15 000 MΩ | 5 000 s | | | | | | | | | | | |
| $U_R > 100\text{ V}$ | 30 000 MΩ | 10 000 s | | | | | | | | | | | |
| Dissipation factor | Max values at +23°C | | | | | | | | | | | | |
| | $C \leq 100\text{nF}$ | $100\text{nF} < C \leq 1\mu\text{F}$ | $C > 1\mu\text{F}$ | | | | | | | | | | |
| 1 kHz | 0.15 % | 0.15 % | 0.15 % | | | | | | | | | | |
| 10 kHz | 0.25 % | 0.25 % | 0.30 % | | | | | | | | | | |
| 100 kHz | 0.50 % | 0.60 % | | | | | | | | | | | |

Pulse rise time

The capacitors can withstand an unlimited number of pulses with a dU/dt according to article table. For voltages (U) lower than the rated voltage (U_R), the specified dU/dt can be multiplied by U_R/U .



Capacitance vs temperature at 1 kHz

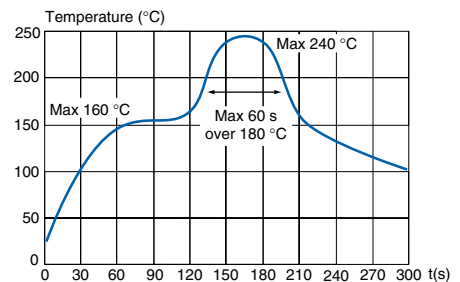


Dissipation factor vs temperature at 1 kHz

RECOMMENDED SOLDERING CONDITIONS

Electrode temperature, Reflow soldering

Preheating temperature should be less than 160°C. The time above 180°C should be less than 1 minute. The peak temperature must not exceed 240°C.



Recommended reflow soldering profile

ARTICLE TABLE

| Capacitance μF | Dimensions in mm ± 0.2 | | | Quantity per package | | Weight g | Max dU/dt V/ μs | Article code |
|-------------------------------------|----------------------------|-----|-----|----------------------|------|-------------|----------------------------------|-----------------------|
| | B | H | L | Bulk | Reel | | | |
| 50 VDC/30 VAC | | | | | | | | |
| CHIP LENGTH 5.7 MM CODE 2220 | | | | | | | | |
| 0.0010 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 102J50J31 TR12 |
| 0.0012 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 122J50J31 TR12 |
| 0.0015 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 152J50J31 TR12 |
| 0.0018 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 182J50J31 TR12 |
| 0.0022 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 222J50J31 TR12 |
| 0.0027 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 272J50J31 TR12 |
| 0.0033 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 332J50J31 TR12 |
| 0.0039 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 392J50J31 TR12 |
| 0.0047 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 472J50J31 TR12 |
| 0.0056 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 562J50J31 TR12 |
| 0.0068 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 682J50J31 TR12 |
| 0.0082 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 822J50J31 TR12 |
| 0.010 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 103J50J31 TR12 |
| 0.012 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 123J50J31 TR12 |
| 0.015 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 15 | SMC5.7 153J50J31 TR12 |
| 0.018 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 15 | SMC5.7 183J50J31 TR12 |
| 0.022 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 15 | SMC5.7 223J50J31 TR12 |
| 0.027 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 15 | SMC5.7 273J50J31 TR12 |
| 0.033 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 15 | SMC5.7 333J50J31 TR12 |
| 0.039 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 6 | SMC5.7 393J50J33 TR12 |
| 0.047 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 6 | SMC5.7 473J50J33 TR12 |
| 0.056 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 6 | SMC5.7 563J50J35 TR12 |
| 0.068 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 6 | SMC5.7 683J50J35 TR12 |
| 0.082 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 6 | SMC5.7 823J50J35 TR12 |
| 0.10 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 6 | SMC5.7 104J50J35 TR12 |
| CHIP LENGTH 7.3 MM CODE 2824 | | | | | | | | |
| 0.0010 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 102J50K31 TR12 |
| 0.0012 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 122J50K31 TR12 |
| 0.0015 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 152J50K31 TR12 |
| 0.0018 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 182J50K31 TR12 |
| 0.0022 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 222J50K31 TR12 |
| 0.0027 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 272J50K31 TR12 |
| 0.0033 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 332J50K31 TR12 |
| 0.0039 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 392J50K31 TR12 |
| 0.0047 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 472J50K31 TR12 |
| 0.0056 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 562J50K31 TR12 |
| 0.0068 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 682J50K31 TR12 |
| 0.0082 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 822J50K31 TR12 |
| 0.010 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 103J50K31 TR12 |
| 0.012 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 123J50K31 TR12 |
| 0.015 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 153J50K31 TR12 |
| 0.018 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 183J50K31 TR12 |
| 0.022 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 223J50K31 TR12 |
| 0.027 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 273J50K31 TR12 |
| 0.033 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 15 | SMC7.3 333J50K31 TR12 |
| 0.039 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 15 | SMC7.3 393J50K31 TR12 |
| 0.047 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 15 | SMC7.3 473J50K31 TR12 |
| 0.056 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 15 | SMC7.3 563J50K31 TR12 |
| 0.068 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 15 | SMC7.3 683J50K31 TR12 |
| 0.082 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 6 | SMC7.3 823J50K33 TR12 |
| 0.10 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 6 | SMC7.3 104J50K33 TR12 |
| 0.12 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 6 | SMC7.3 124J50K35 TR12 |
| 0.15 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 6 | SMC7.3 154J50K35 TR12 |
| 0.18 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 6 | SMC7.3 184J50K35 TR12 |
| 0.22 | 6.0 | 4.5 | 7.3 | 1000 | 1700 | 0.36 | 6 | SMC7.3 224J50K37 TR12 |

ARTICLE TABLE

| Capacitance μF | Dimensions in mm ± 0.2 | | | Quantity per package | | Weight g | Max dU/dt V/ μs | Article code |
|--|----------------------------|-----|------|----------------------|------|-------------|----------------------------------|------------------------|
| | B | H | L | Bulk | Reel | | | |
| 50 VDC/30 VAC | | | | | | | | |
| CHIP LENGTHS 10.2, 12.7 AND 16.5 MM CODES 4036, 5045 AND 6560 | | | | | | | | |
| 0.010 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 103J50A31 TR16 |
| 0.012 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 123J50A31 TR16 |
| 0.015 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 153J50A31 TR16 |
| 0.018 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 183J50A31 TR16 |
| 0.022 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 223J50A31 TR16 |
| 0.027 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 273J50A31 TR16 |
| 0.033 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 333J50A31 TR16 |
| 0.039 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 393J50A31 TR16 |
| 0.047 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 473J50A31 TR16 |
| 0.056 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 563J50A31 TR16 |
| 0.068 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 683J50A31 TR16 |
| 0.082 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 823J50A31 TR16 |
| 0.10 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 104J50A31 TR16 |
| 0.12 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 124J50A31 TR16 |
| 0.15 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 154J50A31 TR16 |
| 0.18 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 184J50A31 TR16 |
| 0.22 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 224J50A31 TR16 |
| 0.27 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 274J50A31 TR16 |
| 0.33 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 334J50A31 TR16 |
| 0.39 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 394J50A31 TR16 |
| 0.47 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 474J50A31 TR16 |
| 0.56 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 564J50A31 TR16 |
| 0.68 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 684J50A31 TR16 |
| 0.82 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 4 | SMC10.2 824J50A31 TR16 |
| 1.0 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 3 | SMC12.7 105J50B31 TR24 |
| 1.2 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 3 | SMC12.7 125J50B31 TR24 |
| 1.5 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 3 | SMC12.7 155J50B31 TR24 |
| 1.8 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 3 | SMC12.7 185J50B31 TR24 |
| 2.2 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 2 | SMC16.5 225J50C31 TR24 |
| 2.7 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 2 | SMC16.5 275J50C31 TR24 |
| 3.3 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 2 | SMC16.5 335J50C31 TR24 |

100 VDC/63 VAC

CHIP LENGTH 5.7 MM CODE 2220

| | | | | | | | | |
|--------|-----|-----|-----|------|------|------|----|------------------------|
| 0.0010 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 102J100J31 TR12 |
| 0.0012 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 122J100J31 TR12 |
| 0.0015 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 152J100J31 TR12 |
| 0.0018 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 182J100J31 TR12 |
| 0.0022 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 222J100J31 TR12 |
| 0.0027 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 272J100J31 TR12 |
| 0.0033 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 332J100J31 TR12 |
| 0.0039 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 392J100J31 TR12 |
| 0.0047 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 472J100J31 TR12 |
| 0.0056 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 562J100J31 TR12 |
| 0.0068 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 682J100J31 TR12 |
| 0.0082 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 822J100J31 TR12 |
| 0.010 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 103J100J31 TR12 |
| 0.012 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 123J100J31 TR12 |
| 0.015 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 15 | SMC5.7 153J100J31 TR12 |
| 0.018 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 15 | SMC5.7 183J100J33 TR12 |
| 0.022 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 15 | SMC5.7 223J100J33 TR12 |
| 0.027 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 15 | SMC5.7 273J100J35 TR12 |
| 0.033 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 15 | SMC5.7 333J100J35 TR12 |

ARTICLE TABLE

| Capacitance μF | Dimensions in mm ± 0.2 | | | Quantity per package | | Weight g | Max dU/dt V/ μs | Article code |
|-------------------------------------|----------------------------|-----|-----|----------------------|------|-------------|------------------------------------|------------------------|
| | B | H | L | Bulk | Reel | | | |
| 100 VDC/63 VAC | | | | | | | | |
| CHIP LENGTH 7.3 MM CODE 2824 | | | | | | | | |
| 0.0010 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 102J100K31 TR12 |
| 0.0012 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 122J100K31 TR12 |
| 0.0015 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 152J100K31 TR12 |
| 0.0018 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 182J100K31 TR12 |
| 0.0022 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 222J100K31 TR12 |
| 0.0027 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 272J100K31 TR12 |
| 0.0033 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 332J100K31 TR12 |
| 0.0039 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 392J100K31 TR12 |
| 0.0047 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 472J100K31 TR12 |
| 0.0056 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 562J100K31 TR12 |
| 0.0068 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 682J100K31 TR12 |
| 0.0082 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 822J100K31 TR12 |
| 0.010 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 103J100K31 TR12 |
| 0.012 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 123J100K31 TR12 |
| 0.015 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 153J100K31 TR12 |
| 0.018 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 183J100K31 TR12 |
| 0.022 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 223J100K31 TR12 |
| 0.027 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 15 | SMC7.3 273J100K33 TR12 |
| 0.033 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 15 | SMC7.3 333J100K33 TR12 |
| 0.039 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 15 | SMC7.3 393J100K35 TR12 |
| 0.047 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 15 | SMC7.3 473J100K35 TR12 |
| 0.056 | 6.0 | 4.5 | 7.3 | 1000 | 1700 | 0.36 | 15 | SMC7.3 563J100K37 TR12 |
| 0.068 | 6.0 | 4.5 | 7.3 | 1000 | 1700 | 0.36 | 15 | SMC7.3 683J100K37 TR12 |

CHIP LENGTHS 10.2, 12.7 AND 16.5 MM CODES 4036, 5045 AND 6560

| | | | | | | | | |
|-------|------|-----|------|------|-----|------|---|-------------------------|
| 0.010 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 103J100A31 TR16 |
| 0.012 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 123J100A31 TR16 |
| 0.015 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 153J100A31 TR16 |
| 0.018 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 183J100A31 TR16 |
| 0.022 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 223J100A31 TR16 |
| 0.027 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 273J100A31 TR16 |
| 0.033 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 333J100A31 TR16 |
| 0.039 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 393J100A31 TR16 |
| 0.047 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 473J100A31 TR16 |
| 0.056 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 563J100A31 TR16 |
| 0.068 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 683J100A31 TR16 |
| 0.082 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 823J100A31 TR16 |
| 0.10 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 104J100A31 TR16 |
| 0.12 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 124J100A31 TR16 |
| 0.15 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 154J100A31 TR16 |
| 0.18 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 184J100A31 TR16 |
| 0.22 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 224J100A31 TR16 |
| 0.27 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 6 | SMC10.2 274J100A31 TR16 |
| 0.33 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 5 | SMC12.7 334J100B31 TR24 |
| 0.39 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 5 | SMC12.7 394J100B31 TR24 |
| 0.47 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 5 | SMC12.7 474J100B31 TR24 |
| 0.56 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 5 | SMC12.7 564J100B31 TR24 |
| 0.68 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 3 | SMC16.5 684J100C31 TR24 |
| 0.82 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 3 | SMC16.5 824J100C31 TR24 |
| 1.0 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 3 | SMC16.5 105J100C31 TR24 |
| 1.2 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 3 | SMC16.5 125J100C31 TR24 |
| 1.5 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 3 | SMC16.5 155J100C31 TR24 |

ARTICLE TABLE

| Capacitance μF | Dimensions in mm ± 0.2 | | | Quantity per package | | Weight g | Max dU/dt V/ μs | Article code |
|--|----------------------------|-----|------|----------------------|------|-------------|----------------------------------|-------------------------|
| | B | H | L | Bulk | Reel | | | |
| 250 VDC/160 VAC | | | | | | | | |
| CHIP LENGTH 5.7 MM CODE 2220 | | | | | | | | |
| 0.0010 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 102J250J31 TR12 |
| 0.0012 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 122J250J31 TR12 |
| 0.0015 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 152J250J31 TR12 |
| 0.0018 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 182J250J31 TR12 |
| 0.0022 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 222J250J31 TR12 |
| 0.0027 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 272J250J31 TR12 |
| 0.0033 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 332J250J31 TR12 |
| 0.0039 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 392J250J31 TR12 |
| 0.0047 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 20 | SMC5.7 472J250J31 TR12 |
| 0.0056 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 20 | SMC5.7 562J250J33 TR12 |
| 0.0068 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 20 | SMC5.7 682J250J33 TR12 |
| 0.0082 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 20 | SMC5.7 822J250J35 TR12 |
| 0.010 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 20 | SMC5.7 103J250J35 TR12 |
| CHIP LENGTH 7.3 MM CODE 2824 | | | | | | | | |
| 0.0010 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 102J250K31 TR12 |
| 0.0012 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 122J250K31 TR12 |
| 0.0015 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 152J250K31 TR12 |
| 0.0018 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 182J250K31 TR12 |
| 0.0022 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 222J250K31 TR12 |
| 0.0027 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 272J250K31 TR12 |
| 0.0033 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 332J250K31 TR12 |
| 0.0039 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 392J250K31 TR12 |
| 0.0047 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 472J250K31 TR12 |
| 0.0056 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 562J250K31 TR12 |
| 0.0068 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 682J250K31 TR12 |
| 0.0082 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 20 | SMC7.3 822J250K31 TR12 |
| 0.010 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 20 | SMC7.3 103J250K33 TR12 |
| 0.012 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 20 | SMC7.3 123J250K33 TR12 |
| 0.015 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 20 | SMC7.3 153J250K33 TR12 |
| 0.018 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 20 | SMC7.3 183J250K35 TR12 |
| 0.022 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 20 | SMC7.3 223J250K35 TR12 |
| CHIP LENGTHS 10.2, 12.7 AND 16.5 MM CODES 4036, 5045 AND 6560 | | | | | | | | |
| 0.010 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 103J250A31 TR16 |
| 0.012 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 123J250A31 TR16 |
| 0.015 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 153J250A31 TR16 |
| 0.018 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 183J250A31 TR16 |
| 0.022 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 223J250A31 TR16 |
| 0.027 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 273J250A31 TR16 |
| 0.033 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 333J250A31 TR16 |
| 0.039 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 393J250A31 TR16 |
| 0.047 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 473J250A31 TR16 |
| 0.056 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 563J250A31 TR16 |
| 0.068 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 683J250A31 TR16 |
| 0.082 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 823J250A31 TR16 |
| 0.10 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 10 | SMC10.2 104J250A31 TR16 |
| 0.12 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 8 | SMC12.7 124J250B31 TR24 |
| 0.15 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 8 | SMC12.7 154J250B31 TR24 |
| 0.18 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 8 | SMC12.7 184J250B31 TR24 |
| 0.22 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 5 | SMC16.5 224J250C31 TR24 |
| 0.27 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 5 | SMC16.5 274J250C31 TR24 |
| 0.33 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 5 | SMC16.5 334J250C31 TR24 |
| 0.39 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 5 | SMC16.5 394J250C31 TR24 |
| 0.47 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 5 | SMC16.5 474J250C31 TR24 |

ARTICLE TABLE

| Capacitance μF | Dimensions in mm ± 0.2 | | | Quantity per package | | Weight g | Max dU/dt V/ μs | Article code |
|--|----------------------------|-----|------|----------------------|------|-------------|------------------------------------|-------------------------|
| | B | H | L | Bulk | Reel | | | |
| 400 VDC/200 VAC | | | | | | | | |
| CHIP LENGTH 5.7 MM CODE 2220 | | | | | | | | |
| 0.0010 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 40 | SMC5.7 102J400J31 TR12 |
| 0.0012 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 40 | SMC5.7 122J400J31 TR12 |
| 0.0015 | 5.0 | 2.5 | 5.7 | 2000 | 3100 | 0.13 | 40 | SMC5.7 152J400J31 TR12 |
| 0.0018 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 40 | SMC5.7 182J400J33 TR12 |
| 0.0022 | 5.0 | 3.0 | 5.7 | 2000 | 2400 | 0.15 | 40 | SMC5.7 222J400J33 TR12 |
| 0.0027 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 40 | SMC5.7 272J400J35 TR12 |
| 0.0033 | 5.0 | 4.0 | 5.7 | 2000 | 2100 | 0.20 | 40 | SMC5.7 332J400J35 TR12 |
| CHIP LENGTH 7.3 MM CODE 2824 | | | | | | | | |
| 0.0010 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 25 | SMC7.3 102J400K31 TR12 |
| 0.0012 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 25 | SMC7.3 122J400K31 TR12 |
| 0.0015 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 25 | SMC7.3 152J400K31 TR12 |
| 0.0018 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 25 | SMC7.3 182J400K31 TR12 |
| 0.0022 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 25 | SMC7.3 222J400K31 TR12 |
| 0.0027 | 6.0 | 2.5 | 7.3 | 2000 | 3100 | 0.18 | 25 | SMC7.3 272J400K31 TR12 |
| 0.0033 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 25 | SMC7.3 332J400K33 TR12 |
| 0.0039 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 25 | SMC7.3 392J400K33 TR12 |
| 0.0047 | 6.0 | 3.0 | 7.3 | 2000 | 2500 | 0.22 | 25 | SMC7.3 472J400K33 TR12 |
| 0.0056 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 25 | SMC7.3 562J400K35 TR12 |
| 0.0068 | 6.0 | 3.5 | 7.3 | 2000 | 2300 | 0.25 | 25 | SMC7.3 682J400K35 TR12 |
| 0.0082 | 6.0 | 4.5 | 7.3 | 1000 | 1700 | 0.36 | 25 | SMC7.3 822J400K37 TR12 |
| 0.010 | 6.0 | 4.5 | 7.3 | 1000 | 1700 | 0.36 | 25 | SMC7.3 103J400K37 TR12 |
| CHIP LENGTHS 10.2, 12.7 AND 16.5 MM CODES 4036, 5045 AND 6560 | | | | | | | | |
| 0.010 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 103J400A31 TR16 |
| 0.012 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 123J400A31 TR16 |
| 0.015 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 153J400A31 TR16 |
| 0.018 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 183J400A31 TR16 |
| 0.022 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 223J400A31 TR16 |
| 0.027 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 273J400A31 TR16 |
| 0.033 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 333J400A31 TR16 |
| 0.039 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 0.88 | 15 | SMC10.2 393J400A31 TR16 |
| 0.047 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 10 | SMC12.7 473J400B31 TR24 |
| 0.056 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 10 | SMC12.7 563J400B31 TR24 |
| 0.068 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 10 | SMC12.7 683J400B31 TR24 |
| 0.082 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 1.57 | 10 | SMC12.7 823J400B31 TR24 |
| 0.10 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 8 | SMC16.5 104J400C31 TR24 |
| 0.12 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 8 | SMC16.5 124J400C31 TR24 |
| 0.15 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 8 | SMC16.5 154J400C31 TR24 |
| 0.18 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 8 | SMC16.5 184J400C31 TR24 |
| 0.22 | 15.0 | 7.0 | 16.5 | 800 | 500 | 2.76 | 8 | SMC16.5 224J400C31 TR24 |

ORDERING INFORMATION

See article table and pages 18 to 23 for options and article code construction.

MARKING

- Rated capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type S for SMC
- Manufacturing date code according to IEC 60062 (year, month)

See also page 68.