

Overview

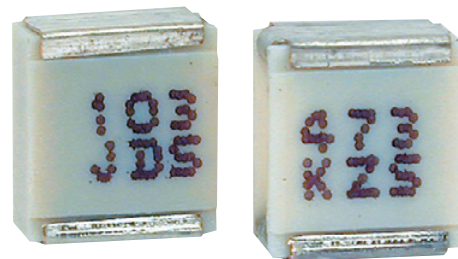
Polyphenylene sulphide (PPS) film capacitor for surface mounting. Encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

Typical applications include timing, filtering and use as a memory capacitor. The SMC Series is designed for high stability, accuracy and temperature.

Benefits

- Rated voltage: 50 – 400 VDC
- Rated voltage: 30 – 200 VAC
- Capacitance range: 0.001 – 3.3 μ F
- EIA size: 2220 – 6560
- Capacitance tolerance: \pm 2%, \pm 2.5%, \pm 5%
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

| SMC | 5.7 | 102 | J | 50 | J31 | TR12 |
|----------------|------------------------------------|---|--|-------------------------|---------------------|----------------------------|
| Series | Chip Length (mm) | Capacitance Code (pF) | Capacitance Tolerance | Rated Voltage (VDC) | Size Code | Packaging Code |
| Metallized PPS | 5.7 7.3 10.2 12.7 16.5 | First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros. | G = \pm 2% H = \pm 2.5% J = \pm 5% | 50 100 250 400 | See Dimension Table | See Ordering Options Table |

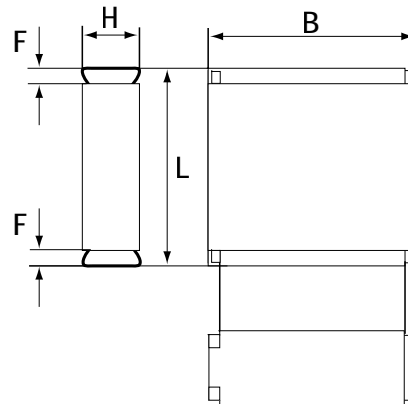
New KEMET Part Number System

| F | 125 | P | L | 102 | J | 050 | V |
|-----------------|----------------|--|---------------------|---|--|---|----------------------------|
| Capacitor Class | Series | Chip Size | Size Code | Capacitance Code (pF) | Capacitance Tolerance | Rated Voltage (VAC) | Packaging Code |
| F = Film | Metallized PPS | P = 2220 S = 2820 W = 4036 Y = 5045 Z = 6560 | See Dimension Table | First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros. | G = \pm 2% R = \pm 2.5% J = \pm 5% | 050 = 50 100 = 100 250 = 250 400 = 400 | See Ordering Options Table |

Ordering Options Table

| Chip Size (EIA) | Packaging Type | KEMET Packaging Code | Legacy Packaging Code |
|-----------------|--|----------------------|-----------------------|
| 2220 | Standard Packaging Options | | |
| | Tape & Reel (Standard Reel) | V | TR12 |
| | Bulk (Bag) | A | BULK |
| 2824 | Standard Packaging Options | | |
| | Tape & Reel (Standard Reel) | V | TR12 |
| | Bulk (Bag) | A | BULK |
| 4036 | Standard Packaging Options | | |
| | Tape & Reel (Horizontal Orientation Standard Reel) | V | TR16 |
| | Bulk (Bag) | A | BULK |
| | Other Packaging Options | | |
| | Tape & Reel (Vertical Orientation Standard Reel) | Y | TV24 |
| 5045 | Standard Packaging Options | | |
| | Tape & Reel (Standard Reel) | V | TR24 |
| | Bulk (Bag) | A | BULK |
| | Other Packaging Options | | |
| | Tape & Reel (Vertical Orientation Standard Reel) | Y | TV24 |
| 6560 | Standard Packaging Options | | |
| | Tape & Reel (Standard Reel) | V | TR24 |
| | Bulk (Bag) | A | BULK |
| | Other Packaging Options | | |
| | Tape & Reel (Vertical Orientation Standard Reel) | Y | TV44 |

Dimensions – Millimeters



| KEMET Size Code | Legacy Size Code | Chip Size (EIA) | B | | H | | L | | F | |
|--------------------|---------------------|--------------------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| | | | Nominal | Tolerance | Nominal | Tolerance | Nominal | Tolerance | Nominal | Tolerance |
| PL | J31 | 2220 | 5.0 | +/-0.2 | 2.5 | +/-0.2 | 5.7 | +/-0.2 | 0.5 | Nominal |
| PP | J33 | 2220 | 5.0 | +/-0.2 | 3.0 | +/-0.2 | 5.7 | +/-0.2 | 0.5 | Nominal |
| PU | J35 | 2220 | 5.0 | +/-0.2 | 4.0 | +/-0.2 | 5.7 | +/-0.2 | 0.5 | Nominal |
| SG | K31 | 2824 | 6.0 | +/-0.2 | 2.5 | +/-0.2 | 7.3 | +/-0.2 | 0.5 | Nominal |
| SL | K33 | 2824 | 6.0 | +/-0.2 | 3.0 | +/-0.2 | 7.3 | +/-0.2 | 0.5 | Nominal |
| SP | K35 | 2824 | 6.0 | +/-0.2 | 3.5 | +/-0.2 | 7.3 | +/-0.2 | 0.5 | Nominal |
| ST | K37 | 2824 | 6.0 | +/-0.2 | 4.5 | +/-0.2 | 7.3 | +/-0.2 | 0.5 | Nominal |
| WP | A31 | 4036 | 9.1 | +/-0.2 | 5.5 | +/-0.2 | 10.2 | +/-0.2 | 0.5 | Nominal |
| YR | B31 | 5045 | 11.5 | +/-0.2 | 6.5 | +/-0.2 | 12.7 | +/-0.2 | 0.5 | Nominal |
| ZS | C31 | 6560 | 15 | +/-0.2 | 7.0 | +/-0.2 | 16.5 | +/-0.2 | 0.5 | Nominal |

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

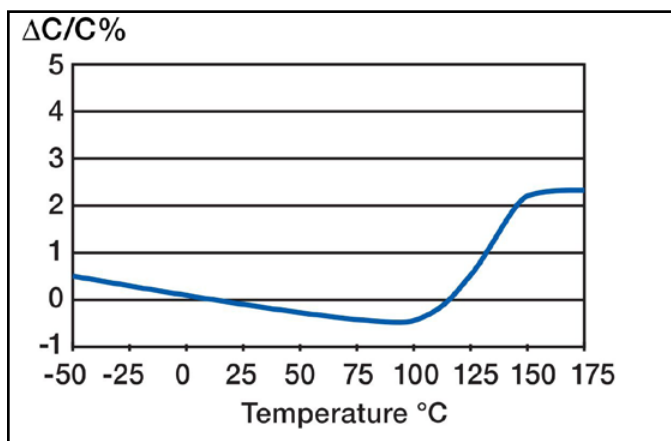


RoHS Compliant

Performance Characteristics

| | | | | |
|----------------------------|--|-------------|----------------|--------------|
| Rated Voltage (VDC) | 50 | 100 | 250 | 400 |
| Rated Voltage (VAC) | 30 | 63 | 160 | 200 |
| Capacitance Range (µF) | 0.001 – 3.3 | 0.001 – 1.5 | 0.001 – 0.47 | 0.001 – 0.22 |
| Chip Size (EIA) | 2220 – 6560 | | | |
| Capacitance Tolerance | ±2%, ±2.5%, ±5% | | | |
| Category Temperature Range | -55°C to +125°C | | | |
| Rated Temperature | +100°C | | | |
| Voltage Derating | The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C | | | |
| Climatic Category | 55/125/56 | | | |
| Test Voltage | 1.6 x V _R , 60 seconds | | | |
| Insulation Resistance | Measured at +20°C According to IEC 60384-19 | | | |
| | Minimum Value Between Terminals | | | |
| | | C ≤ 0.33 µF | C > 0.33 µF | |
| | V _R ≤ 100 | 15,000 MΩ | 5,000 MΩ • µF | |
| Dissipation Factor | Maximum Values at +23°C | | | |
| | | C ≤ 0.1 µF | 0.1 < C ≤ 1 µF | C > 1 µF |
| | 1 kHz | 0.15% | 0.15% | 0.15% |
| | 10 kHz | 0.25% | 0.25% | 0.30% |
| Pulse Rise Time | The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V _R), the specified dV/dt can be multiplied by V _R /V. | | | |

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

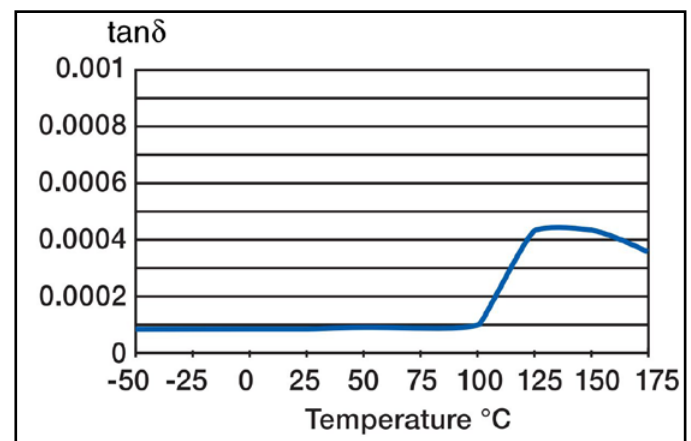


Table 1 – Ratings & Part Number Reference

| VDC | VAC | Cap Value (µF) | Size Code (New/Legacy) | Dimensions in mm | | | Chip Size | dV/dt (V/µs) | New KEMET Part Number | Legacy Part Number |
|-----|-----|----------------|------------------------|------------------|-----|------|-----------|--------------|-----------------------|-----------------------|
| | | | | B | H | L | | | | |
| 50 | 30 | 0.0010 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL102(1)050(2) | SMC5.7102(1)50J31(2) |
| 50 | 30 | 0.0012 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL122(1)050(2) | SMC5.7122(1)50J31(2) |
| 50 | 30 | 0.0015 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL152(1)050(2) | SMC5.7152(1)50J31(2) |
| 50 | 30 | 0.0018 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL182(1)050(2) | SMC5.7182(1)50J31(2) |
| 50 | 30 | 0.0022 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL222(1)050(2) | SMC5.7222(1)50J31(2) |
| 50 | 30 | 0.0027 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL272(1)050(2) | SMC5.7272(1)50J31(2) |
| 50 | 30 | 0.0033 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL332(1)050(2) | SMC5.7332(1)50J31(2) |
| 50 | 30 | 0.0039 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL392(1)050(2) | SMC5.7392(1)50J31(2) |
| 50 | 30 | 0.0047 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL472(1)050(2) | SMC5.7472(1)50J31(2) |
| 50 | 30 | 0.0056 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL562(1)050(2) | SMC5.7562(1)50J31(2) |
| 50 | 30 | 0.0068 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL682(1)050(2) | SMC5.7682(1)50J31(2) |
| 50 | 30 | 0.0082 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL822(1)050(2) | SMC5.7822(1)50J31(2) |
| 50 | 30 | 0.010 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL103(1)050(2) | SMC5.7103(1)50J31(2) |
| 50 | 30 | 0.012 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL123(1)050(2) | SMC5.7123(1)50J31(2) |
| 50 | 30 | 0.015 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 15 | F125PL153(1)050(2) | SMC5.7153(1)50J31(2) |
| 50 | 30 | 0.018 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 15 | F125PL183(1)050(2) | SMC5.7183(1)50J31(2) |
| 50 | 30 | 0.022 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 15 | F125PL223(1)050(2) | SMC5.7223(1)50J31(2) |
| 50 | 30 | 0.027 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 15 | F125PL273(1)050(2) | SMC5.7273(1)50J31(2) |
| 50 | 30 | 0.033 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 15 | F125PL333(1)050(2) | SMC5.7333(1)50J31(2) |
| 50 | 30 | 0.039 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 6 | F125PP393(1)050(2) | SMC5.7393(1)50J33(2) |
| 50 | 30 | 0.047 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 6 | F125PP473(1)050(2) | SMC5.7473(1)50J33(2) |
| 50 | 30 | 0.056 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 6 | F125PU563(1)050(2) | SMC5.7563(1)50J35(2) |
| 50 | 30 | 0.068 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 6 | F125PU683(1)050(2) | SMC5.7683(1)50J35(2) |
| 50 | 30 | 0.082 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 6 | F125PU823(1)050(2) | SMC5.7823(1)50J35(2) |
| 50 | 30 | 0.10 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 6 | F125PU104(1)050(2) | SMC5.7104(1)50J35(2) |
| 50 | 30 | 0.0010 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG102(1)050(2) | SMC7.3102(1)50K31(2) |
| 50 | 30 | 0.0012 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG122(1)050(2) | SMC7.3122(1)50K31(2) |
| 50 | 30 | 0.0015 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG152(1)050(2) | SMC7.3152(1)50K31(2) |
| 50 | 30 | 0.0018 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG182(1)050(2) | SMC7.3182(1)50K31(2) |
| 50 | 30 | 0.0022 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG222(1)050(2) | SMC7.3222(1)50K31(2) |
| 50 | 30 | 0.0027 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG272(1)050(2) | SMC7.3272(1)50K31(2) |
| 50 | 30 | 0.0033 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG332(1)050(2) | SMC7.3332(1)50K31(2) |
| 50 | 30 | 0.0039 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG392(1)050(2) | SMC7.3392(1)50K31(2) |
| 50 | 30 | 0.0047 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG472(1)050(2) | SMC7.3472(1)50K31(2) |
| 50 | 30 | 0.0056 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG562(1)050(2) | SMC7.3562(1)50K31(2) |
| 50 | 30 | 0.0068 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG682(1)050(2) | SMC7.3682(1)50K31(2) |
| 50 | 30 | 0.0082 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG822(1)050(2) | SMC7.3822(1)50K31(2) |
| 50 | 30 | 0.010 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG103(1)050(2) | SMC7.3103(1)50K31(2) |
| 50 | 30 | 0.012 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG123(1)050(2) | SMC7.3123(1)50K31(2) |
| 50 | 30 | 0.015 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG153(1)050(2) | SMC7.3153(1)50K31(2) |
| 50 | 30 | 0.018 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG183(1)050(2) | SMC7.3183(1)50K31(2) |
| 50 | 30 | 0.022 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG223(1)050(2) | SMC7.3223(1)50K31(2) |
| 50 | 30 | 0.027 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG273(1)050(2) | SMC7.3273(1)50K31(2) |
| 50 | 30 | 0.033 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 15 | F125SG333(1)050(2) | SMC7.3333(1)50K31(2) |
| 50 | 30 | 0.039 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 15 | F125SG393(1)050(2) | SMC7.3393(1)50K31(2) |
| 50 | 30 | 0.047 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 15 | F125SG473(1)050(2) | SMC7.3473(1)50K31(2) |
| 50 | 30 | 0.056 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 15 | F125SG563(1)050(2) | SMC7.3563(1)50K31(2) |
| 50 | 30 | 0.068 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 15 | F125SG683(1)050(2) | SMC7.3683(1)50K31(2) |
| 50 | 30 | 0.082 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 6 | F125SL823(1)050(2) | SMC7.3823(1)50K33(2) |
| 50 | 30 | 0.10 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 6 | F125SL104(1)050(2) | SMC7.3104(1)50K33(2) |
| 50 | 30 | 0.12 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 6 | F125SP124(1)050(2) | SMC7.3124(1)50K35(2) |
| 50 | 30 | 0.15 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 6 | F125SP154(1)050(2) | SMC7.3154(1)50K35(2) |
| 50 | 30 | 0.18 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 6 | F125SP184(1)050(2) | SMC7.3184(1)50K35(2) |
| 50 | 30 | 0.22 | ST/K37 | 6.0 | 4.5 | 7.3 | 2824 | 6 | F125ST224(1)050(2) | SMC7.3224(1)50K37(2) |
| 50 | 30 | 0.010 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP103(1)050(2) | SMC10.2103(1)50A31(2) |
| 50 | 30 | 0.012 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP123(1)050(2) | SMC10.2123(1)50A31(2) |
| 50 | 30 | 0.015 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP153(1)050(2) | SMC10.2153(1)50A31(2) |
| 50 | 30 | 0.018 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP183(1)050(2) | SMC10.2183(1)50A31(2) |
| 50 | 30 | 0.022 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP223(1)050(2) | SMC10.2223(1)50A31(2) |

(1) G = ±2%, R = ±2.5% (Legacy code = H), J = ±5%.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

| VDC | VAC | Cap Value (µF) | Size Code (New/Legacy) | Dimensions in mm | | | Chip Size | dV/dt (V/µs) | New KEMET Part Number | Legacy Part Number |
|-----|-----|----------------|------------------------|------------------|-----|------|-----------|--------------|-----------------------|-----------------------|
| | | | | B | H | L | | | | |
| 50 | 30 | 0.027 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP273(1)050(2) | SMC10.2273(1)50A31(2) |
| 50 | 30 | 0.033 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP333(1)050(2) | SMC10.2333(1)50A31(2) |
| 50 | 30 | 0.039 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP393(1)050(2) | SMC10.2393(1)50A31(2) |
| 50 | 30 | 0.047 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP473(1)050(2) | SMC10.2473(1)50A31(2) |
| 50 | 30 | 0.056 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP563(1)050(2) | SMC10.2563(1)50A31(2) |
| 50 | 30 | 0.068 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP683(1)050(2) | SMC10.2683(1)50A31(2) |
| 50 | 30 | 0.082 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP823(1)050(2) | SMC10.2823(1)50A31(2) |
| 50 | 30 | 0.10 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP104(1)050(2) | SMC10.2104(1)50A31(2) |
| 50 | 30 | 0.12 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP124(1)050(2) | SMC10.2124(1)50A31(2) |
| 50 | 30 | 0.15 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP154(1)050(2) | SMC10.2154(1)50A31(2) |
| 50 | 30 | 0.18 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP184(1)050(2) | SMC10.2184(1)50A31(2) |
| 50 | 30 | 0.22 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP224(1)050(2) | SMC10.2224(1)50A31(2) |
| 50 | 30 | 0.27 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP274(1)050(2) | SMC10.2274(1)50A31(2) |
| 50 | 30 | 0.33 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP334(1)050(2) | SMC10.2334(1)50A31(2) |
| 50 | 30 | 0.39 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP394(1)050(2) | SMC10.2394(1)50A31(2) |
| 50 | 30 | 0.47 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP474(1)050(2) | SMC10.2474(1)50A31(2) |
| 50 | 30 | 0.56 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP564(1)050(2) | SMC10.2564(1)50A31(2) |
| 50 | 30 | 0.68 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP684(1)050(2) | SMC10.2684(1)50A31(2) |
| 50 | 30 | 0.82 | WP/A31 | 9.1 | 5.5 | 10.2 | 4036 | 4 | F125WP824(1)050(2) | SMC10.2824(1)50A31(2) |
| 50 | 30 | 1.0 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 3 | F125YR105(1)050(2) | SMC12.7105(1)50B31(2) |
| 50 | 30 | 1.2 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 3 | F125YR125(1)050(2) | SMC12.7125(1)50B31(2) |
| 50 | 30 | 1.5 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 3 | F125YR155(1)050(2) | SMC12.7155(1)50B31(2) |
| 50 | 30 | 1.8 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 2 | F125ZS185(1)050(2) | SMC16.5185(1)50C31(2) |
| 50 | 30 | 2.2 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 2 | F125ZS225(1)050(2) | SMC16.5225(1)50C31(2) |
| 50 | 30 | 2.7 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 2 | F125ZS275(1)050(2) | SMC16.5275(1)50C31(2) |
| 50 | 30 | 3.3 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 2 | F125ZS335(1)050(2) | SMC16.5335(1)50C31(2) |
| 100 | 63 | 0.0010 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL102(1)100(2) | SMC5.7102(1)100J31(2) |
| 100 | 63 | 0.0012 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL122(1)100(2) | SMC5.7122(1)100J31(2) |
| 100 | 63 | 0.0015 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL152(1)100(2) | SMC5.7152(1)100J31(2) |
| 100 | 63 | 0.0018 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL182(1)100(2) | SMC5.7182(1)100J31(2) |
| 100 | 63 | 0.0022 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL222(1)100(2) | SMC5.7222(1)100J31(2) |
| 100 | 63 | 0.0027 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL272(1)100(2) | SMC5.7272(1)100J31(2) |
| 100 | 63 | 0.0033 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL332(1)100(2) | SMC5.7332(1)100J31(2) |
| 100 | 63 | 0.0039 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL392(1)100(2) | SMC5.7392(1)100J31(2) |
| 100 | 63 | 0.0047 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL472(1)100(2) | SMC5.7472(1)100J31(2) |
| 100 | 63 | 0.0056 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL562(1)100(2) | SMC5.7562(1)100J31(2) |
| 100 | 63 | 0.0068 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL682(1)100(2) | SMC5.7682(1)100J31(2) |
| 100 | 63 | 0.0082 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL822(1)100(2) | SMC5.7822(1)100J31(2) |
| 100 | 63 | 0.010 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL103(1)100(2) | SMC5.7103(1)100J31(2) |
| 100 | 63 | 0.012 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL123(1)100(2) | SMC5.7123(1)100J31(2) |
| 100 | 63 | 0.015 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 15 | F125PL153(1)100(2) | SMC5.7153(1)100J31(2) |
| 100 | 63 | 0.018 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 15 | F125PP183(1)100(2) | SMC5.7183(1)100J33(2) |
| 100 | 63 | 0.022 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 15 | F125PP223(1)100(2) | SMC5.7223(1)100J33(2) |
| 100 | 63 | 0.027 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 15 | F125PU273(1)100(2) | SMC5.7273(1)100J35(2) |
| 100 | 63 | 0.033 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 15 | F125PU333(1)100(2) | SMC5.7333(1)100J35(2) |
| 100 | 63 | 0.0010 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG102(1)100(2) | SMC7.3102(1)100K31(2) |
| 100 | 63 | 0.0012 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG122(1)100(2) | SMC7.3122(1)100K31(2) |
| 100 | 63 | 0.0015 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG152(1)100(2) | SMC7.3152(1)100K31(2) |
| 100 | 63 | 0.0018 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG182(1)100(2) | SMC7.3182(1)100K31(2) |
| 100 | 63 | 0.0022 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG222(1)100(2) | SMC7.3222(1)100K31(2) |
| 100 | 63 | 0.0027 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG272(1)100(2) | SMC7.3272(1)100K31(2) |
| 100 | 63 | 0.0033 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG332(1)100(2) | SMC7.3332(1)100K31(2) |
| 100 | 63 | 0.0039 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG392(1)100(2) | SMC7.3392(1)100K31(2) |
| 100 | 63 | 0.0047 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG472(1)100(2) | SMC7.3472(1)100K31(2) |
| 100 | 63 | 0.0056 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG562(1)100(2) | SMC7.3562(1)100K31(2) |
| 100 | 63 | 0.0068 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG682(1)100(2) | SMC7.3682(1)100K31(2) |
| 100 | 63 | 0.0082 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG822(1)100(2) | SMC7.3822(1)100K31(2) |
| 100 | 63 | 0.010 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG103(1)100(2) | SMC7.3103(1)100K31(2) |
| 100 | 63 | 0.012 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG123(1)100(2) | SMC7.3123(1)100K31(2) |

(1) G = ±2%, R = ±2.5% (Legacy code = H), J = ±5%.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

| VDC | VAC | Cap Value (µF) | Size Code (New/Legacy) | Dimensions in mm | | | Chip Size | dV/dt (V/µs) | New KEMET Part Number | Legacy Part Number |
|-----|-----|----------------|------------------------|------------------|-----|------|-----------|--------------|-----------------------|------------------------|
| | | | | B | H | L | | | | |
| 100 | 63 | 0.015 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG153(1)100(2) | SMC7.3153(1)100K31(2) |
| 100 | 63 | 0.018 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG183(1)100(2) | SMC7.3183(1)100K31(2) |
| 100 | 63 | 0.022 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG223(1)100(2) | SMC7.3223(1)100K31(2) |
| 100 | 63 | 0.027 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 15 | F125SL273(1)100(2) | SMC7.3273(1)100K33(2) |
| 100 | 63 | 0.033 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 15 | F125SL333(1)100(2) | SMC7.3333(1)100K33(2) |
| 100 | 63 | 0.039 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 15 | F125SP393(1)100(2) | SMC7.3393(1)100K35(2) |
| 100 | 63 | 0.047 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 15 | F125SP473(1)100(2) | SMC7.3473(1)100K35(2) |
| 100 | 63 | 0.056 | ST/K37 | 6.0 | 4.5 | 7.3 | 2824 | 15 | F125ST563(1)100(2) | SMC7.3563(1)100K37(2) |
| 100 | 63 | 0.068 | ST/K37 | 6.0 | 4.5 | 7.3 | 2824 | 15 | F125ST683(1)100(2) | SMC7.3683(1)100K37(2) |
| 100 | 63 | 0.010 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP103(1)100(2) | SMC10.2103(1)100A31(2) |
| 100 | 63 | 0.012 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP123(1)100(2) | SMC10.2123(1)100A31(2) |
| 100 | 63 | 0.015 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP153(1)100(2) | SMC10.2153(1)100A31(2) |
| 100 | 63 | 0.018 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP183(1)100(2) | SMC10.2183(1)100A31(2) |
| 100 | 63 | 0.022 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP223(1)100(2) | SMC10.2223(1)100A31(2) |
| 100 | 63 | 0.027 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP273(1)100(2) | SMC10.2273(1)100A31(2) |
| 100 | 63 | 0.033 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP333(1)100(2) | SMC10.2333(1)100A31(2) |
| 100 | 63 | 0.039 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP393(1)100(2) | SMC10.2393(1)100A31(2) |
| 100 | 63 | 0.047 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP473(1)100(2) | SMC10.2473(1)100A31(2) |
| 100 | 63 | 0.056 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP563(1)100(2) | SMC10.2563(1)100A31(2) |
| 100 | 63 | 0.068 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP683(1)100(2) | SMC10.2683(1)100A31(2) |
| 100 | 63 | 0.082 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP823(1)100(2) | SMC10.2823(1)100A31(2) |
| 100 | 63 | 0.10 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP104(1)100(2) | SMC10.2104(1)100A31(2) |
| 100 | 63 | 0.12 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP124(1)100(2) | SMC10.2124(1)100A31(2) |
| 100 | 63 | 0.15 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP154(1)100(2) | SMC10.2154(1)100A31(2) |
| 100 | 63 | 0.18 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP184(1)100(2) | SMC10.2184(1)100A31(2) |
| 100 | 63 | 0.22 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP224(1)100(2) | SMC10.2224(1)100A31(2) |
| 100 | 63 | 0.27 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 6 | F125WP274(1)100(2) | SMC10.2274(1)100A31(2) |
| 100 | 63 | 0.33 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 5 | F125YR334(1)100(2) | SMC12.7334(1)100B31(2) |
| 100 | 63 | 0.39 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 5 | F125YR394(1)100(2) | SMC12.7394(1)100B31(2) |
| 100 | 63 | 0.47 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 5 | F125YR474(1)100(2) | SMC12.7474(1)100B31(2) |
| 100 | 63 | 0.56 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 5 | F125YR564(1)100(2) | SMC12.7564(1)100B31(2) |
| 100 | 63 | 0.68 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 3 | F125ZS684(1)100(2) | SMC16.5684(1)100C31(2) |
| 100 | 63 | 0.82 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 3 | F125ZS824(1)100(2) | SMC16.5824(1)100C31(2) |
| 100 | 63 | 1.0 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 3 | F125ZS105(1)100(2) | SMC16.5105(1)100C31(2) |
| 100 | 63 | 1.2 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 3 | F125ZS125(1)100(2) | SMC16.5125(1)100C31(2) |
| 100 | 63 | 1.5 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 3 | F125ZS155(1)100(2) | SMC16.5155(1)100C31(2) |
| 250 | 160 | 0.0010 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL102(1)250(2) | SMC5.7102(1)250J31(2) |
| 250 | 160 | 0.0012 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL122(1)250(2) | SMC5.7122(1)250J31(2) |
| 250 | 160 | 0.0015 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL152(1)250(2) | SMC5.7152(1)250J31(2) |
| 250 | 160 | 0.0018 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL182(1)250(2) | SMC5.7182(1)250J31(2) |
| 250 | 160 | 0.0022 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL222(1)250(2) | SMC5.7222(1)250J31(2) |
| 250 | 160 | 0.0027 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL272(1)250(2) | SMC5.7272(1)250J31(2) |
| 250 | 160 | 0.0033 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL332(1)250(2) | SMC5.7332(1)250J31(2) |
| 250 | 160 | 0.0039 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL392(1)250(2) | SMC5.7392(1)250J31(2) |
| 250 | 160 | 0.0047 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 20 | F125PL472(1)250(2) | SMC5.7472(1)250J31(2) |
| 250 | 160 | 0.0056 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 20 | F125PP562(1)250(2) | SMC5.7562(1)250J33(2) |
| 250 | 160 | 0.0068 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 20 | F125PP682(1)250(2) | SMC5.7682(1)250J33(2) |
| 250 | 160 | 0.0082 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 20 | F125PU822(1)250(2) | SMC5.7822(1)250J35(2) |
| 250 | 160 | 0.010 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 20 | F125PU103(1)250(2) | SMC5.7103(1)250J35(2) |
| 250 | 160 | 0.0010 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG102(1)250(2) | SMC7.3102(1)250K31(2) |
| 250 | 160 | 0.0012 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG122(1)250(2) | SMC7.3122(1)250K31(2) |
| 250 | 160 | 0.0015 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG152(1)250(2) | SMC7.3152(1)250K31(2) |
| 250 | 160 | 0.0018 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG182(1)250(2) | SMC7.3182(1)250K31(2) |
| 250 | 160 | 0.0022 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG222(1)250(2) | SMC7.3222(1)250K31(2) |
| 250 | 160 | 0.0027 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG272(1)250(2) | SMC7.3272(1)250K31(2) |
| 250 | 160 | 0.0033 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG332(1)250(2) | SMC7.3332(1)250K31(2) |
| 250 | 160 | 0.0039 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG392(1)250(2) | SMC7.3392(1)250K31(2) |
| 250 | 160 | 0.0047 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG472(1)250(2) | SMC7.3472(1)250K31(2) |
| 250 | 160 | 0.0056 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG562(1)250(2) | SMC7.3562(1)250K31(2) |

(1) G = ±2%, R = ±2.5% (Legacy code = H), J = ±5%.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

| VDC | VAC | Cap Value (μF) | Size Code (New/Legacy) | Dimensions in mm | | | Chip Size | dV/dt (V/μs) | New KEMET Part Number | Legacy Part Number |
|-----|-----|----------------|------------------------|------------------|--------|--------|-----------|--------------|-----------------------|------------------------|
| | | | | B | H | L | | | | |
| 250 | 160 | 0.0068 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG682(1)250(2) | SMC7.3682(1)250K31(2) |
| 250 | 160 | 0.0082 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 20 | F125SG822(1)250(2) | SMC7.3822(1)250K31(2) |
| 250 | 160 | 0.010 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 20 | F125SL103(1)250(2) | SMC7.3103(1)250K33(2) |
| 250 | 160 | 0.012 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 20 | F125SL123(1)250(2) | SMC7.3123(1)250K33(2) |
| 250 | 160 | 0.015 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 20 | F125SL153(1)250(2) | SMC7.3153(1)250K33(2) |
| 250 | 160 | 0.018 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 20 | F125SP183(1)250(2) | SMC7.3183(1)250K35(2) |
| 250 | 160 | 0.022 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 20 | F125SP223(1)250(2) | SMC7.3223(1)250K35(2) |
| 250 | 160 | 0.010 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP103(1)250(2) | SMC10.2103(1)250A31(2) |
| 250 | 160 | 0.012 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP123(1)250(2) | SMC10.2123(1)250A31(2) |
| 250 | 160 | 0.015 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP153(1)250(2) | SMC10.2153(1)250A31(2) |
| 250 | 160 | 0.018 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP183(1)250(2) | SMC10.2183(1)250A31(2) |
| 250 | 160 | 0.022 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP223(1)250(2) | SMC10.2223(1)250A31(2) |
| 250 | 160 | 0.027 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP273(1)250(2) | SMC10.2273(1)250A31(2) |
| 250 | 160 | 0.033 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP333(1)250(2) | SMC10.2333(1)250A31(2) |
| 250 | 160 | 0.039 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP393(1)250(2) | SMC10.2393(1)250A31(2) |
| 250 | 160 | 0.047 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP473(1)250(2) | SMC10.2473(1)250A31(2) |
| 250 | 160 | 0.056 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP563(1)250(2) | SMC10.2563(1)250A31(2) |
| 250 | 160 | 0.068 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP683(1)250(2) | SMC10.2683(1)250A31(2) |
| 250 | 160 | 0.082 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP823(1)250(2) | SMC10.2823(1)250A31(2) |
| 250 | 160 | 0.10 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 10 | F125WP104(1)250(2) | SMC10.2104(1)250A31(2) |
| 250 | 160 | 0.12 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 8 | F125YR124(1)250(2) | SMC12.7124(1)250B31(2) |
| 250 | 160 | 0.15 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 8 | F125YR154(1)250(2) | SMC12.7154(1)250B31(2) |
| 250 | 160 | 0.18 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 8 | F125YR184(1)250(2) | SMC12.7184(1)250B31(2) |
| 250 | 160 | 0.22 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 5 | F125ZS224(1)250(2) | SMC16.5224(1)250C31(2) |
| 250 | 160 | 0.27 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 5 | F125ZS274(1)250(2) | SMC16.5274(1)250C31(2) |
| 250 | 160 | 0.33 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 5 | F125ZS334(1)250(2) | SMC16.5334(1)250C31(2) |
| 250 | 160 | 0.39 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 5 | F125ZS394(1)250(2) | SMC16.5394(1)250C31(2) |
| 250 | 160 | 0.47 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 5 | F125ZS474(1)250(2) | SMC16.5474(1)250C31(2) |
| 400 | 200 | 0.0010 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 40 | F125PL102(1)400(2) | SMC5.7102(1)400J31(2) |
| 400 | 200 | 0.0012 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 40 | F125PL122(1)400(2) | SMC5.7122(1)400J31(2) |
| 400 | 200 | 0.0015 | PL/J31 | 5.0 | 2.5 | 5.7 | 2220 | 40 | F125PL152(1)400(2) | SMC5.7152(1)400J31(2) |
| 400 | 200 | 0.0018 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 40 | F125PP182(1)400(2) | SMC5.7182(1)400J33(2) |
| 400 | 200 | 0.0022 | PP/J33 | 5.0 | 3.0 | 5.7 | 2220 | 40 | F125PP222(1)400(2) | SMC5.7222(1)400J33(2) |
| 400 | 200 | 0.0027 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 40 | F125PU272(1)400(2) | SMC5.7272(1)400J35(2) |
| 400 | 200 | 0.0033 | PU/J35 | 5.0 | 4.0 | 5.7 | 2220 | 40 | F125PU332(1)400(2) | SMC5.7332(1)400J35(2) |
| 400 | 200 | 0.0010 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 25 | F125SG102(1)400(2) | SMC7.3102(1)400K31(2) |
| 400 | 200 | 0.0012 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 25 | F125SG122(1)400(2) | SMC7.3122(1)400K31(2) |
| 400 | 200 | 0.0015 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 25 | F125SG152(1)400(2) | SMC7.3152(1)400K31(2) |
| 400 | 200 | 0.0018 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 25 | F125SG182(1)400(2) | SMC7.3182(1)400K31(2) |
| 400 | 200 | 0.0022 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 25 | F125SG222(1)400(2) | SMC7.3222(1)400K31(2) |
| 400 | 200 | 0.0027 | SG/K31 | 6.0 | 2.5 | 7.3 | 2824 | 25 | F125SG272(1)400(2) | SMC7.3272(1)400K31(2) |
| 400 | 200 | 0.0033 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 25 | F125SL332(1)400(2) | SMC7.3332(1)400K33(2) |
| 400 | 200 | 0.0039 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 25 | F125SL392(1)400(2) | SMC7.3392(1)400K33(2) |
| 400 | 200 | 0.0047 | SL/K33 | 6.0 | 3.0 | 7.3 | 2824 | 25 | F125SL472(1)400(2) | SMC7.3472(1)400K33(2) |
| 400 | 200 | 0.0056 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 25 | F125SP562(1)400(2) | SMC7.3562(1)400K35(2) |
| 400 | 200 | 0.0068 | SP/K35 | 6.0 | 3.5 | 7.3 | 2824 | 25 | F125SP682(1)400(2) | SMC7.3682(1)400K35(2) |
| 400 | 200 | 0.0082 | ST/K37 | 6.0 | 4.5 | 7.3 | 2824 | 25 | F125ST822(1)400(2) | SMC7.3822(1)400K37(2) |
| 400 | 200 | 0.010 | ST/K37 | 6.0 | 4.5 | 7.3 | 2824 | 25 | F125ST103(1)400(2) | SMC7.3103(1)400K37(2) |
| 400 | 200 | 0.010 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP103(1)400(2) | SMC10.2103(1)400A31(2) |
| 400 | 200 | 0.012 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP123(1)400(2) | SMC10.2123(1)400A31(2) |
| 400 | 200 | 0.015 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP153(1)400(2) | SMC10.2153(1)400A31(2) |
| 400 | 200 | 0.018 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP183(1)400(2) | SMC10.2183(1)400A31(2) |
| 400 | 200 | 0.022 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP223(1)400(2) | SMC10.2223(1)400A31(2) |
| 400 | 200 | 0.027 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP273(1)400(2) | SMC10.2273(1)400A31(2) |
| 400 | 200 | 0.033 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP333(1)400(2) | SMC10.2333(1)400A31(2) |
| 400 | 200 | 0.039 | WPI/A31 | 9.1 | 5.5 | 10.2 | 4036 | 15 | F125WP393(1)400(2) | SMC10.2393(1)400A31(2) |
| 400 | 200 | 0.047 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 10 | F125YR473(1)400(2) | SMC12.7473(1)400B31(2) |
| 400 | 200 | 0.056 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 10 | F125YR563(1)400(2) | SMC12.7563(1)400B31(2) |
| 400 | 200 | 0.068 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 10 | F125YR683(1)400(2) | SMC12.7683(1)400B31(2) |
| VDC | VAC | Cap Value (μF) | Size Code (New/Legacy) | B (mm) | H (mm) | L (mm) | Chip Size | dV/dt (V/μs) | New KEMET Part Number | Legacy Part Number |

(1) G = ±2%, R = ±2.5% (Legacy code = H), J = ±5%.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

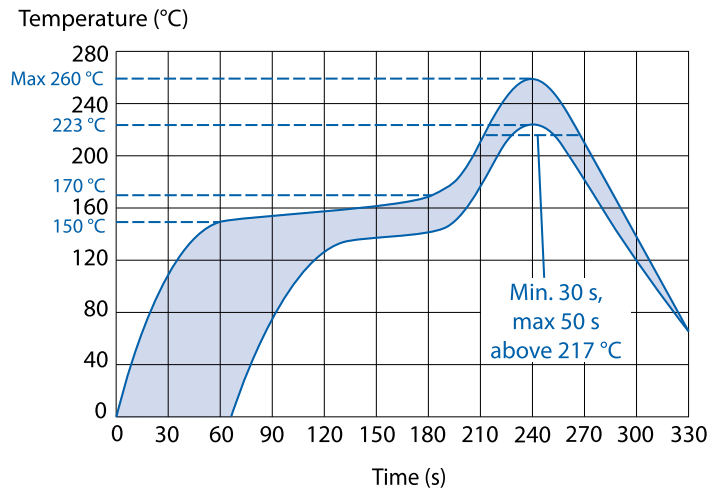
| VDC | VAC | Cap Value (µF) | Size Code (New/Legacy) | Dimensions in mm | | | Chip Size | dV/dt (V/µs) | New KEMET Part Number | Legacy Part Number |
|-----|-----|----------------|------------------------|------------------|--------|--------|-----------|--------------|-----------------------|------------------------|
| | | | | B | H | L | | | | |
| 400 | 200 | 0.082 | YR/B31 | 11.5 | 6.5 | 12.7 | 5045 | 10 | F125YR823(1)400(2) | SMC12.7823(1)400B31(2) |
| 400 | 200 | 0.10 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 8 | F125ZS104(1)400(2) | SMC16.5104(1)400C31(2) |
| 400 | 200 | 0.12 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 8 | F125ZS124(1)400(2) | SMC16.5124(1)400C31(2) |
| 400 | 200 | 0.15 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 8 | F125ZS154(1)400(2) | SMC16.5154(1)400C31(2) |
| 400 | 200 | 0.18 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 8 | F125ZS184(1)400(2) | SMC16.5184(1)400C31(2) |
| 400 | 200 | 0.22 | ZS/C31 | 15.0 | 7.0 | 16.5 | 6560 | 8 | F125ZS224(1)400(2) | SMC16.5224(1)400C31(2) |
| VDC | VAC | Cap Value (µF) | Size Code (New/Legacy) | B (mm) | H (mm) | L (mm) | Chip Size | dV/dt (V/µs) | New KEMET Part Number | Legacy Part Number |

(1) G = ±2%, R = ±2.5% (Legacy code = H), J = ±5%.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 260°C.



Marking

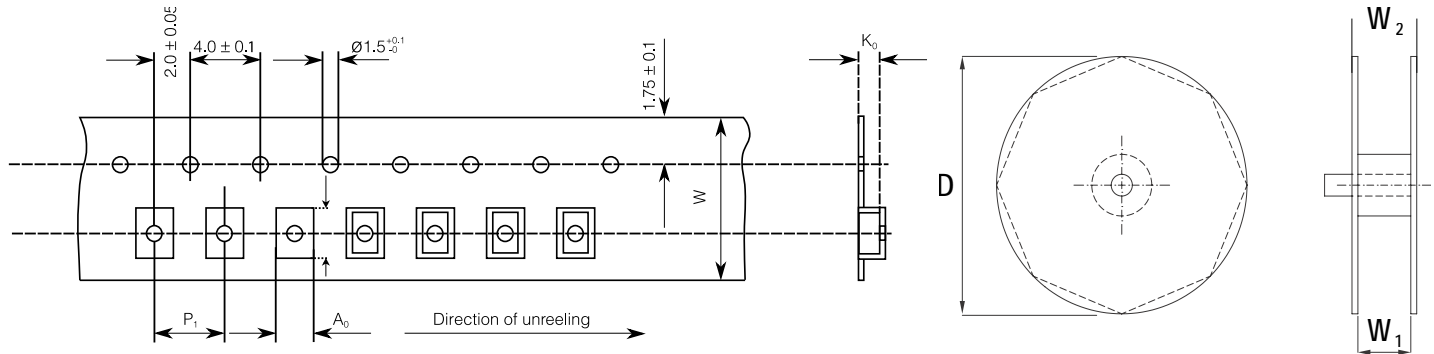
- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type S for SMC
- Manufacturing date code

Packaging Quantities

| Chip Size (EIA) | Base (mm) | Height (mm) | Length (mm) | Bulk | Reel Horizontal Orientation | Reel Vertical Orientation |
|-----------------|-----------|-------------|-------------|------|-----------------------------|---------------------------|
| 2220 | 5 | 2.5 | 5.7 | 2000 | 3100 | |
| 2220 | 5 | 3 | 5.7 | 2000 | 2400 | |
| 2220 | 5 | 4 | 5.7 | 2000 | 2100 | |
| 2824 | 6 | 2.5 | 7.3 | 2000 | 3100 | |
| 2824 | 6 | 3 | 7.3 | 2000 | 2500 | |
| 2824 | 6 | 3.5 | 7.3 | 2000 | 2300 | |
| 2824 | 6 | 4.5 | 7.3 | 1000 | 1700 | |
| 4036 | 9.1 | 5.5 | 10.2 | 1000 | 800 | 500 |
| 5045 | 11.5 | 6.5 | 12.7 | 1000 | 600 | 400 |
| 6560 | 15 | 7 | 16.5 | 800 | 500 | 200 |

Carrier Taping & Packaging (IEC 60286–2)

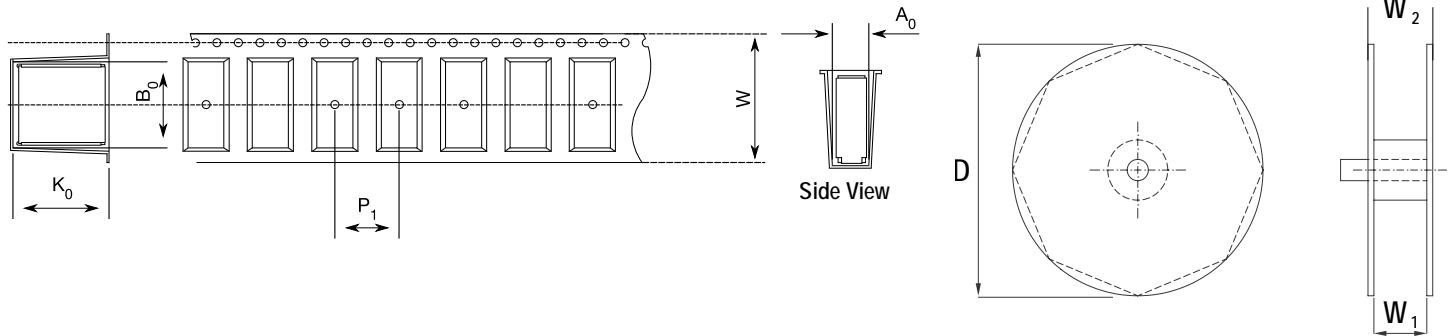
Horizontal Taping Orientation



| EIA Size Code Horizontal Mounting | Dimensions in mm | | | Taping Specification | | | | | | | |
|---|------------------|---------|---------|----------------------|----------------|----------------|----------------|----------------|--------|----------------|----------------|
| | B | H | L | W | P ₁ | A ₀ | B ₀ | K ₀ | D | W ₁ | W ₂ |
| | Nominal | Nominal | Nominal | -0/+0.3 | +/-0.1 | Nominal | Nominal | Nominal | -/+2.0 | -0/+2 | Maximum |
| 2220 | 5.0 | 2.5 | 5.7 | 12.0 | 8.0 | 5.5 | 6.0 | 2.8 | 330 | 12.4 | 22.0 |
| 2220 | 5.0 | 3.0 | 5.7 | 12.0 | 8.0 | 5.5 | 6.0 | 3.3 | 330 | 12.4 | 22.0 |
| 2220 | 5.0 | 4.0 | 5.7 | 12.0 | 8.0 | 5.5 | 6.0 | 4.3 | 330 | 12.4 | 22.0 |
| 2824 | 6.0 | 2.5 | 7.3 | 12.0 | 8.0 | 6.5 | 7.5 | 2.8 | 330 | 12.4 | 22.0 |
| 2824 | 6.0 | 3.0 | 7.3 | 12.0 | 8.0 | 6.5 | 7.5 | 3.3 | 330 | 12.4 | 22.0 |
| 2824 | 6.0 | 3.5 | 7.3 | 12.0 | 8.0 | 6.5 | 7.5 | 3.8 | 330 | 12.4 | 22.0 |
| 2824 | 6.0 | 4.5 | 7.3 | 12.0 | 8.0 | 6.5 | 7.5 | 4.8 | 330 | 12.4 | 22.0 |
| 4036 | 9.1 | 5.5 | 10.2 | 16.0 | 16.0 | 9.5 | 10.5 | 5.8 | 330 | 16.4 | 22.0 |
| 5045 | 11.5 | 6.5 | 12.7 | 24.0 | 16.0 | 11.9 | 13.1 | 6.8 | 330 | 24.4 | 30.0 |
| 6560 | 15.0 | 7.0 | 16.5 | 24.0 | 20.0 | 15.4 | 16.8 | 7.3 | 330 | 24.4 | 30.0 |

Carrier Taping & Packaging (IEC 60286–2) cont'd

Vertical Taping Orientation



| Size Code Vertical Mounting | Dimensions in mm | | | Taping Specification | | | | | | | |
|-----------------------------------|------------------|---------|---------|----------------------|----------------|----------------|----------------|----------------|--------|----------------|----------------|
| | B | H | L | W | P ₁ | A ₀ | B ₀ | K ₀ | D | W ₁ | W ₂ |
| | Nominal | Nominal | Nominal | -0/+0.3 | +/-0.1 | Nominal | Nominal | Nominal | -/+2.0 | -0/+2 | Maximum |
| 4022 | 5.5 | 9.1 | 10.2 | 24.0 | 16.0 | 6.0 | 10.5 | 9.3 | 330 | 24.4 | 30.0 |
| 5026 | 6.5 | 11.5 | 12.7 | 24.0 | 16.0 | 6.9 | 13.1 | 11.8 | 330 | 24.4 | 30.0 |
| 6528 | 7.0 | 15.0 | 16.5 | 44.0 | 20.0 | 7.5 | 17.0 | 15.3 | 330 | 44.5 | 49.5 |

Note: Chip dimensions B and H correspond to dimensions H and B in the horizontal mounting table.

KEMET Corporation World Headquarters

2835 KEMET Way
Simpsonville, SC 29681

Mailing Address:
P.O. Box 5928
Greenville, SC 29606

www.kemet.com
Tel: 864-963-6300
Fax: 864-963-6521

Corporate Offices

Fort Lauderdale, FL
Tel: 954-766-2800

North America

Southeast

Lake Mary, FL
Tel: 407-855-8886

Northeast

Wilmington, MA
Tel: 978-658-1663

West Chester, PA
Tel: 610-692-4642

Central

Novi, MI
Tel: 248-994-1030

Carmel, IN
Tel: 317-706-6742

West

Milpitas, CA
Tel: 408-433-9950

Mexico

Zapopan, Jalisco
Tel: 52-33-3123-2141

Europe

Southern Europe

Geneva, Switzerland
Tel: 41-22-715-0100

Paris, France
Tel: 33-1-4646-1009

Sasso Marconi, Italy
Tel: 39-051-939111

Milan, Italy
Tel: 39-02-57518176

Rome, Italy
Tel: 39-06-23231718

Madrid, Spain
Tel: 34-91-804-4303

Central Europe

Landsberg, Germany
Tel: 49-8191-3350800

Dortmund, Germany
Tel: 49-2307-3619672

Kwidzyn, Poland
Tel: 48-55-279-7025

Northern Europe

Bishop's Stortford, United Kingdom
Tel: 44-1279-757201

Weymouth, United Kingdom
Tel: 44-1305-830747

Coatbridge, Scotland
Tel: 44-1236-434455

Färjestaden, Sweden
Tel: 46-485-563934

Espoo, Finland
Tel: 358-9-5406-5000

Asia

Northeast Asia

Hong Kong
Tel: 852-2305-1168

Shenzhen, China
Tel: 86-755-2518-1306

Beijing, China
Tel: 86-10-5829-1711

Shanghai, China
Tel: 86-21-6447-0707

Taipei, Taiwan
Tel: 886-2-27528585

Southeast Asia

Singapore
Tel: 65-6586-1900

Penang, Malaysia
Tel: 60-4-6430200

Bangalore, India
Tel: 91-806-53-76817

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Other KEMET Resources

| Tools | |
|--------------------------------|---|
| Resource | Location |
| Configure A Part: CapEdge | http://capacitoredge.kemet.com |
| SPICE & FIT Software | http://www.kemet.com/spice |
| Search Our FAQs: KnowledgeEdge | http://www.kemet.com/keask |

| Product Information | |
|--|---|
| Resource | Location |
| Products | http://www.kemet.com/products |
| Technical Resources (Including Soldering Techniques) | http://www.kemet.com/technicalpapers |
| RoHS Statement | http://www.kemet.com/rohs |
| Quality Documents | http://www.kemet.com/qualitydocuments |

| Product Request | |
|-------------------------|---|
| Resource | Location |
| Sample Request | http://www.kemet.com/sample |
| Engineering Kit Request | http://www.kemet.com/kits |

| Contact | |
|--------------------|---|
| Resource | Location |
| Website | www.kemet.com |
| Contact Us | http://www.kemet.com/contact |
| Investor Relations | http://www.kemet.com/ir |
| Call Us | 1-877-MyKEMET |
| Twitter | http://twitter.com/kemetcapacitors |

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