

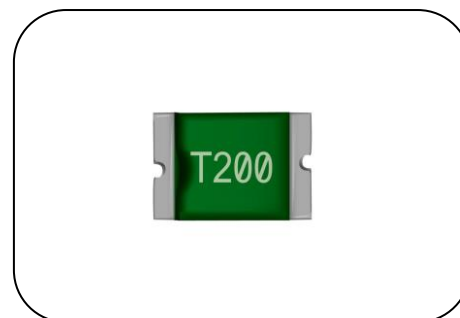
Polymer PTC Resettable Fuse: KMC Series



SMD Type

■ Features

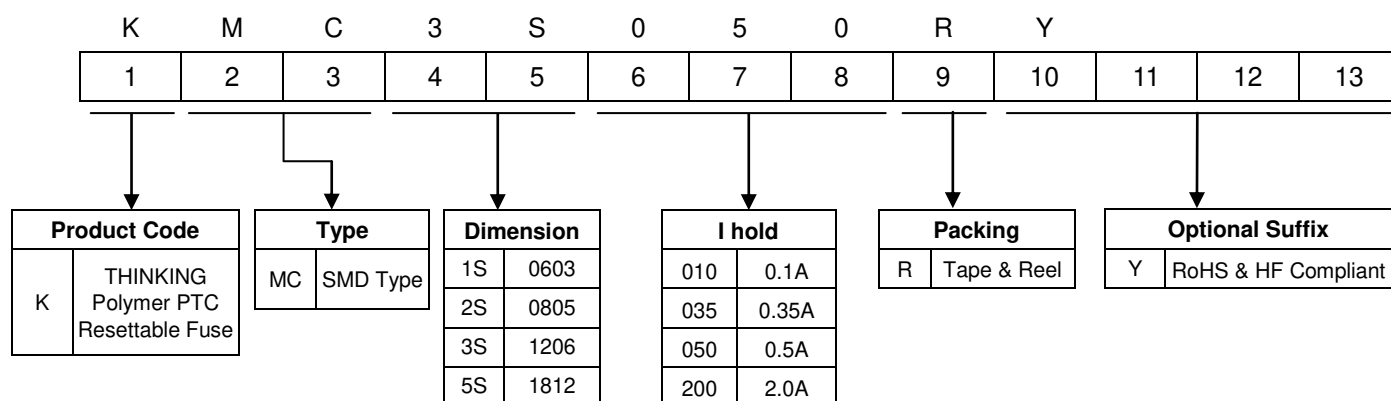
1. RoHS & Halogen-Free (HF) compliant
2. EIA size: 0603, 0805, 1206, 1812
3. Hold current ratings from 0.05A to 3A
4. Voltage ratings from 6V computer and electronic applications to 60V
5. Small footprint
6. Fast time to trip
7. Operating & storage temperature range: -40~+85°C
8. Agency approval: UL / cUL / TUV



■ Recommended Applications

1. USB, HDMI, IEEE 1394 interface
2. PC, Motherboard, NB, Tablet
3. Mobile phone
4. Digital cameras
5. Telecommunication
6. Consumer device

■ Part Number Code

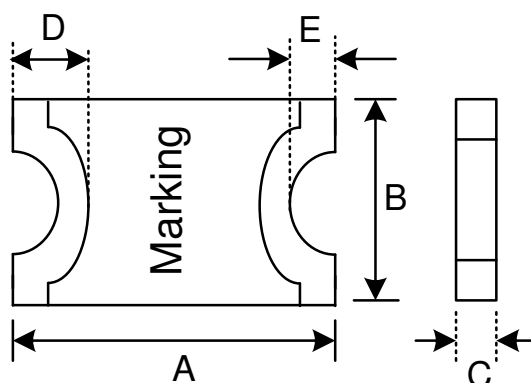


Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ Structure & Dimensions



(Unit: mm)

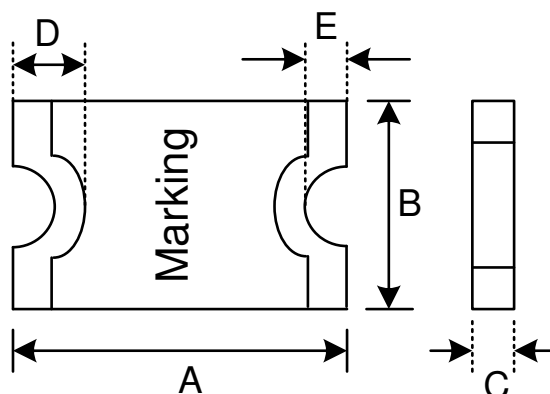
| Part No. | A | | B | | C | | D | | E | |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) |
| KMC1S010 | 1.40 | 1.80 | 0.60 | 1.00 | 0.30 | 0.55 | 0.15 | 0.50 | -- | 0.40 |
| KMC1S020 | | | | | 0.30 | 0.55 | | | | |
| KMC1S025 | | | | | 0.30 | 0.55 | | | | |
| KMC1S035 | | | | | 0.50 | 0.70 | | | | |
| KMC2S010 | 2.00 | 2.20 | 1.20 | 1.50 | 0.40 | 0.85 | 0.15 | 0.55 | 0.05 | 0.45 |
| KMC2S010-24 | | | | | 0.40 | 0.85 | | | | |
| KMC2S020 | | | | | 0.40 | 0.85 | | | | |
| KMC2S035 | | | | | 0.30 | 0.75 | | | | |
| KMC2S050 | | | | | 0.30 | 0.85 | | | | |
| KMC2S075 | | | | | 0.50 | 0.85 | | | | |
| KMC2S110 | | | | | 0.50 | 0.90 | | | | |

Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ Structure & Dimensions



(Unit: mm)

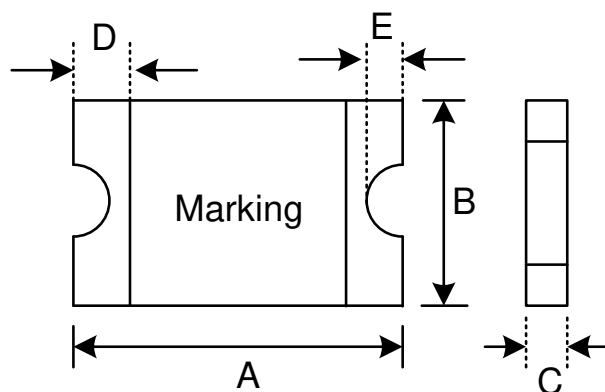
| Part No. | A | | B | | C | | D | | E | |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) |
| KMC3S005 | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 0.90 | 0.125 | 0.75 | 0.08 | 0.45 |
| KMC3S010 | | | | | 0.50 | 0.90 | | | | |
| KMC3S012 | | | | | 0.35 | 0.75 | | | | |
| KMC3S016 | | | | | 0.28 | 0.68 | | | | |
| KMC3S020 | | | | | 0.28 | 0.68 | | | | |
| KMC3S025 | | | | | 0.28 | 0.68 | | | | |
| KMC3S035 | | | | | 0.28 | 0.68 | | | | |
| KMC3S050 | | | | | 0.28 | 0.68 | | | | |
| KMC3S050-15 | | | | | 0.28 | 1.06 | | | | |
| KMC3S075 | | | | | 0.28 | 0.75 | | | | |
| KMC3S100 | | | | | 0.40 | 0.88 | | | | |
| KMC3S110 | | | | | 0.40 | 0.88 | | | | |
| KMC3S150 | | | | | 0.55 | 1.35 | | | | |
| KMC3S200 | | | | | 0.80 | 1.35 | | | | |

Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ Structure & Dimensions



(Unit: mm)

| Part No. | A | | B | | C | | D | | E | |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) | (Min.) | (Max.) |
| KMC5S010 | 4.37 | 4.73 | 3.07 | 3.41 | 0.50 | 0.90 | 0.20 | 1.2 | 0.15 | 0.65 |
| KMC5S014 | | | | | 0.50 | 0.90 | | | | |
| KMC5S020 | | | | | 0.50 | 0.90 | | | | |
| KMC5S035 | | | | | 0.28 | 0.68 | | | | |
| KMC5S050 | | | | | 0.28 | 0.68 | | | | |
| KMC5S075 | | | | | 0.28 | 0.68 | | | | |
| KMC5S075-24 | | | | | 0.60 | 1.20 | | | | |
| KMC5S075-33 | | | | | 0.60 | 1.20 | | | | |
| KMC5S110 | | | | | 0.28 | 0.68 | | | | |
| KMC5S110-16 | | | | | 0.60 | 1.00 | | | | |
| KMC5S110-24 | | | | | 0.60 | 1.00 | | | | |
| KMC5S110-33 | | | | | 0.80 | 1.60 | | | | |
| KMC5S125 | | | | | 0.28 | 0.68 | | | | |
| KMC5S125-16 | | | | | 0.30 | 1.25 | | | | |
| KMC5S150 | | | | | 0.28 | 0.68 | | | | |
| KMC5S150-12 | | | | | 0.60 | 1.00 | | | | |
| KMC5S150-24 | | | | | 0.70 | 1.50 | | | | |
| KMC5S160 | | | | | 0.28 | 0.68 | | | | |
| KMC5S200 | | | | | 0.35 | 0.85 | | | | |
| KMC5S200-16 | | | | | 0.80 | 1.60 | | | | |
| KMC5S260 | 0.35 | 0.90 | | | | | | | | |
| KMC5S260-16 | 0.35 | 2.00 | | | | | | | | |
| KMC5S300 | 0.60 | 1.20 | | | | | | | | |

Polymer PTC Resettable Fuse: KMC Series



SMD Type

■ Electrical Characteristics at 23°C

| Part No. | Marking | V _{max.} | I _{max.} | I _{hold} | I _{trip} | Pd (Max.) | Maximum Time to Trip | | Resistance | | Safety Approvals | |
|-------------|---------|-------------------|-------------------|-------------------|-------------------|--------------|-------------------------|------|------------|--------|---------------------|------------|
| | | | | | | | (V _{dc}) | (A) | (A) | (A) | (W) | Initial Ri |
| | | Current (A) | Time (Sec.) | Min. (Ω) | Max. (Ω) | | | | | | | |
| KMC1S010 | 1 | 15 | 40 | 0.10 | 0.30 | 0.50 | 0.50 | 1.00 | 0.900 | 6.000 | √ | √ |
| KMC1S020 | 2 | 9 | 40 | 0.20 | 0.50 | 0.50 | 1.00 | 0.60 | 0.550 | 3.500 | √ | √ |
| KMC1S025 | 5 | 9 | 40 | 0.25 | 0.55 | 0.50 | 8.00 | 0.08 | 0.500 | 3.000 | √ | √ |
| KMC1S035 | 7 | 6 | 40 | 0.35 | 0.75 | 0.50 | 8.00 | 0.10 | 0.200 | 1.000 | √ | √ |
| KMC2S010 | D | 15 | 100 | 0.10 | 0.30 | 0.50 | 0.50 | 1.50 | 1.000 | 6.000 | √ | √ |
| KMC2S010-24 | D | 24 | 100 | 0.10 | 0.30 | 0.50 | 0.50 | 1.50 | 1.000 | 6.000 | √ | √ |
| KMC2S020 | L | 9 | 100 | 0.20 | 0.50 | 0.50 | 8.00 | 0.02 | 0.650 | 3.500 | √ | √ |
| KMC2S035 | T | 6 | 100 | 0.35 | 0.75 | 0.50 | 8.00 | 0.10 | 0.250 | 1.200 | √ | √ |
| KMC2S050 | O | 6 | 100 | 0.50 | 1.00 | 0.50 | 8.00 | 0.10 | 0.150 | 0.850 | √ | √ |
| KMC2S075 | X | 6 | 100 | 0.75 | 1.50 | 0.50 | 8.00 | 0.20 | 0.090 | 0.350 | √ | √ |
| KMC2S110 | V | 6 | 40 | 1.10 | 2.00 | 0.60 | 8.00 | 0.30 | 0.060 | 0.210 | √ | |
| KMC3S005 | TH | 60 | 100 | 0.05 | 0.15 | 0.40 | 0.25 | 1.50 | 3.600 | 50.000 | √ | √ |
| KMC3S010 | TY | 60 | 100 | 0.10 | 0.25 | 0.40 | 0.50 | 1.00 | 1.600 | 15.000 | √ | √ |
| KMC3S012 | TJ | 30 | 100 | 0.125 | 0.29 | 0.50 | 1.00 | 0.20 | 1.400 | 6.000 | √ | |
| KMC3S016 | TK | 30 | 100 | 0.16 | 0.37 | 0.50 | 1.00 | 0.30 | 1.100 | 4.500 | √ | √ |
| KMC3S020 | TL | 24 | 100 | 0.20 | 0.42 | 0.60 | 8.00 | 0.10 | 0.650 | 2.600 | √ | |
| KMC3S025 | TN | 16 | 100 | 0.25 | 0.50 | 0.60 | 8.00 | 0.08 | 0.550 | 2.300 | √ | √ |
| KMC3S035 | TP | 16 | 100 | 0.35 | 0.75 | 0.60 | 8.00 | 0.10 | 0.300 | 1.200 | √ | √ |
| KMC3S050 | TQ | 8 | 100 | 0.50 | 1.00 | 0.60 | 8.00 | 0.10 | 0.150 | 0.700 | √ | √ |
| KMC3S050-15 | TQ1 | 15 | 100 | 0.50 | 1.00 | 0.90 | 8.00 | 0.10 | 0.150 | 0.700 | √ | √ |
| KMC3S075 | TR | 8 | 100 | 0.75 | 1.50 | 0.60 | 8.00 | 0.10 | 0.100 | 0.290 | √ | √ |
| KMC3S100 | TS | 6 | 100 | 1.00 | 1.80 | 0.80 | 8.00 | 0.30 | 0.065 | 0.210 | √ | √ |
| KMC3S110 | TU | 8 | 100 | 1.10 | 2.20 | 0.80 | 8.00 | 0.10 | 0.070 | 0.200 | √ | √ |
| KMC3S150 | TV | 8 | 100 | 1.50 | 3.00 | 0.80 | 8.00 | 0.30 | 0.040 | 0.120 | √ | √ |
| KMC3S200 | TX | 6 | 100 | 2.00 | 3.50 | 1.00 | 8.00 | 1.50 | 0.020 | 0.080 | √ | √ |

Note : UL&cUL File No: E138827

TUV File No: R50143386 , J50218395

Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ Electrical Characteristics at 23°C

| Part No. | Marking | Vmax. | Imax. | Ihold | Itrip | Pd (Max.) | Maximum Time to Trip | | Resistance | | Safety Approvals | |
|-------------|--------------------------------|--------------------|-------|-------|-------|--------------|-------------------------|----------------|------------|-----------------|---------------------|-----|
| | | | | | | | Current (A) | Time (Sec.) | Initial Ri | Post Trip R1 | UL/cUL | TUV |
| | | (V _{dc}) | (A) | (A) | (A) | (W) | | | Min. (Ω) | Max.(Ω) | | |
| KMC5S010 | T 010 | 30 | 100 | 0.10 | 0.30 | 0.80 | 0.50 | 1.50 | 1.600 | 15.000 | √ | √ |
| KMC5S014 | T 014 | 60 | 10 | 0.14 | 0.34 | 0.80 | 1.50 | 0.15 | 1.500 | 6.000 | √ | √ |
| KMC5S020 | T 020 | 30 | 100 | 0.20 | 0.40 | 0.80 | 8.00 | 0.02 | 0.800 | 5.000 | √ | √ |
| KMC5S035 | T 035 | 16 | 100 | 0.35 | 0.70 | 0.80 | 8.00 | 0.10 | 0.320 | 1.500 | √ | √ |
| KMC5S050 | T 050 | 16 | 100 | 0.50 | 1.00 | 0.80 | 8.00 | 0.15 | 0.150 | 1.000 | √ | √ |
| KMC5S075 | T 075 | 16 | 100 | 0.75 | 1.50 | 0.80 | 8.00 | 0.20 | 0.110 | 0.450 | √ | √ |
| KMC5S075-24 | T ⁰⁷⁵ ₂₄ | 24 | 100 | 0.75 | 1.50 | 1.0 | 8.00 | 0.20 | 0.110 | 0.400 | √ | √ |
| KMC5S075-33 | T ⁰⁷⁵ ₃₃ | 33 | 20 | 0.75 | 1.50 | 1.2 | 8.00 | 0.20 | 0.110 | 0.400 | √ | √ |
| KMC5S110 | T 110 | 8 | 100 | 1.10 | 2.20 | 0.80 | 8.00 | 0.30 | 0.040 | 0.210 | √ | √ |
| KMC5S110-16 | T ¹¹⁰ ₁₆ | 16 | 100 | 1.10 | 2.20 | 1.0 | 8.00 | 0.50 | 0.060 | 0.180 | √ | √ |
| KMC5S110-24 | T ¹¹⁰ ₂₄ | 24 | 20 | 1.10 | 2.20 | 1.2 | 8.00 | 0.50 | 0.060 | 0.200 | √ | √ |
| KMC5S110-33 | T ¹¹⁰ ₃₃ | 33 | 20 | 1.10 | 2.20 | 1.2 | 8.00 | 0.50 | 0.060 | 0.200 | √ | √ |
| KMC5S125 | T 125 | 6 | 100 | 1.25 | 2.50 | 0.80 | 8.00 | 0.40 | 0.050 | 0.140 | √ | √ |
| KMC5S125-16 | T ¹²⁵ ₁₆ | 16 | 100 | 1.25 | 2.50 | 1.0 | 8.00 | 0.40 | 0.050 | 0.140 | √ | √ |
| KMC5S150 | T 150 | 8 | 100 | 1.50 | 3.00 | 0.90 | 8.00 | 0.30 | 0.040 | 0.110 | √ | √ |
| KMC5S150-12 | T ¹⁵⁰ ₁₂ | 12 | 100 | 1.50 | 3.00 | 1.0 | 8.00 | 0.50 | 0.040 | 0.110 | √ | √ |
| KMC5S150-24 | T ¹⁵⁰ ₂₄ | 24 | 20 | 1.50 | 3.00 | 1.2 | 8.00 | 1.50 | 0.040 | 0.120 | √ | √ |
| KMC5S160 | T 160 | 8 | 100 | 1.60 | 3.20 | 0.80 | 8.00 | 1.00 | 0.030 | 0.100 | √ | √ |
| KMC5S200 | T 200 | 8 | 100 | 2.00 | 3.50 | 1.20 | 8.00 | 2.00 | 0.020 | 0.060 | √ | √ |
| KMC5S200-16 | T 200 | 16 | 100 | 2.00 | 3.50 | 1.20 | 8.00 | 2.00 | 0.020 | 0.060 | √ | |
| KMC5S260 | T 260 | 8 | 100 | 2.60 | 5.00 | 1.20 | 8.00 | 2.50 | 0.015 | 0.047 | √ | √ |
| KMC5S260-16 | T 260 | 16 | 100 | 2.60 | 5.00 | 1.5 | 8.00 | 5.0 | 0.015 | 0.050 | √ | |
| KMC5S300 | T 300 | 6 | 100 | 3.00 | 5.00 | 1.20 | 8.00 | 4.00 | 0.012 | 0.040 | √ | √ |

Note : UL&cUL File No: E138827

TUV File No: R50143386 , J50218395

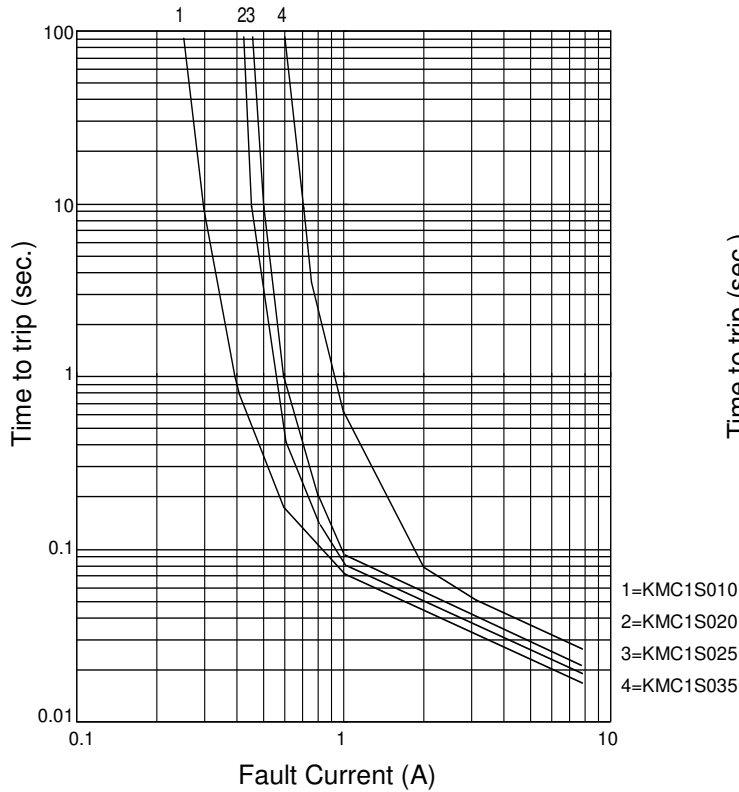
Polymer PTC Resettable Fuse: KMC Series

SMD Type

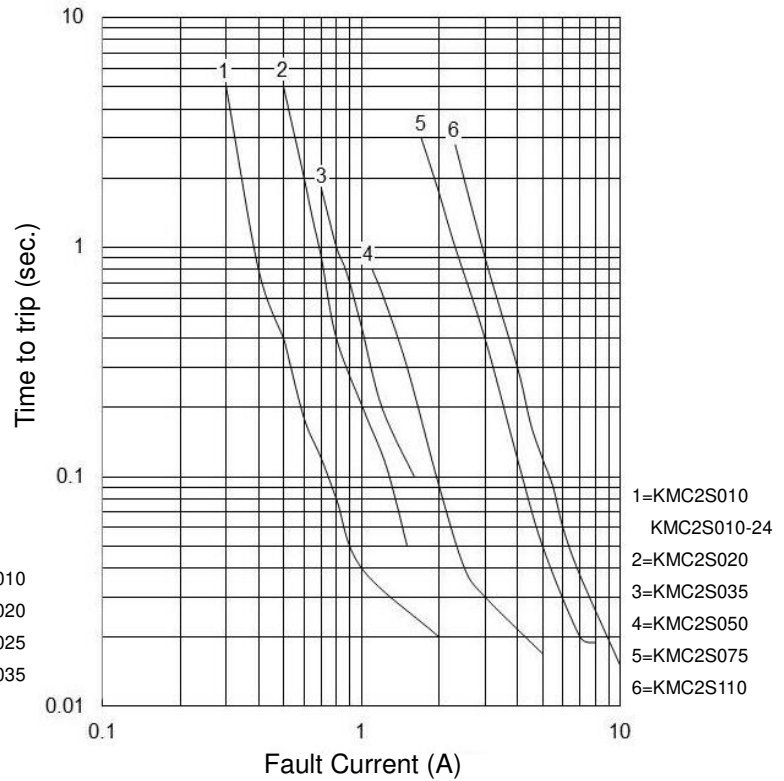


Typical Time to Trip Curve at 23°C

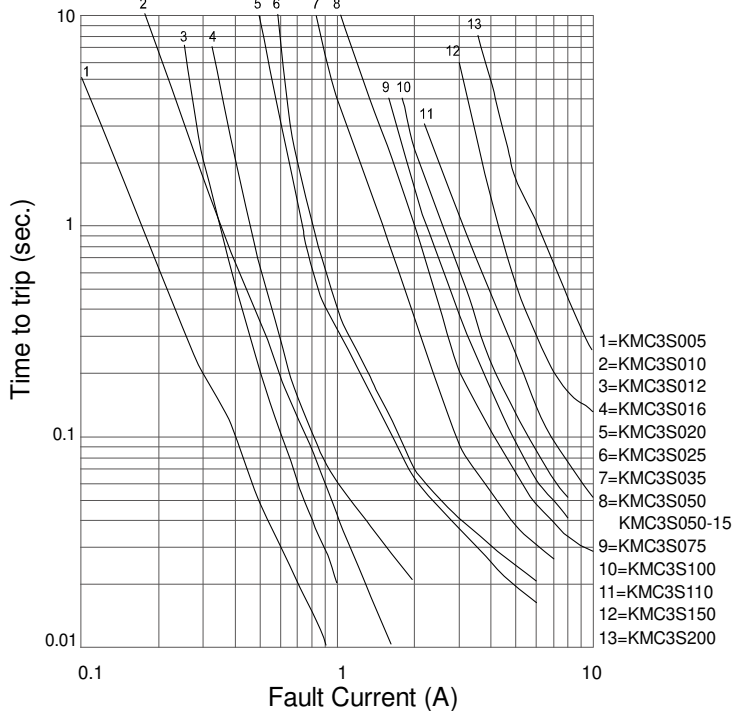
KMC1S: 0603 Series



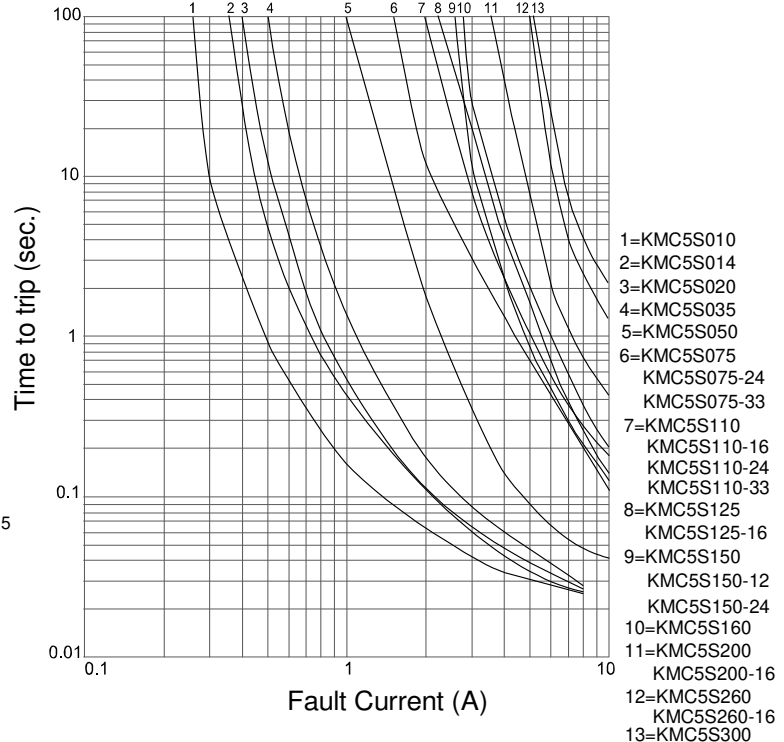
KMC2S: 0805 Series



KMC3S: 1206 Series



KMC5S: 1812 Series



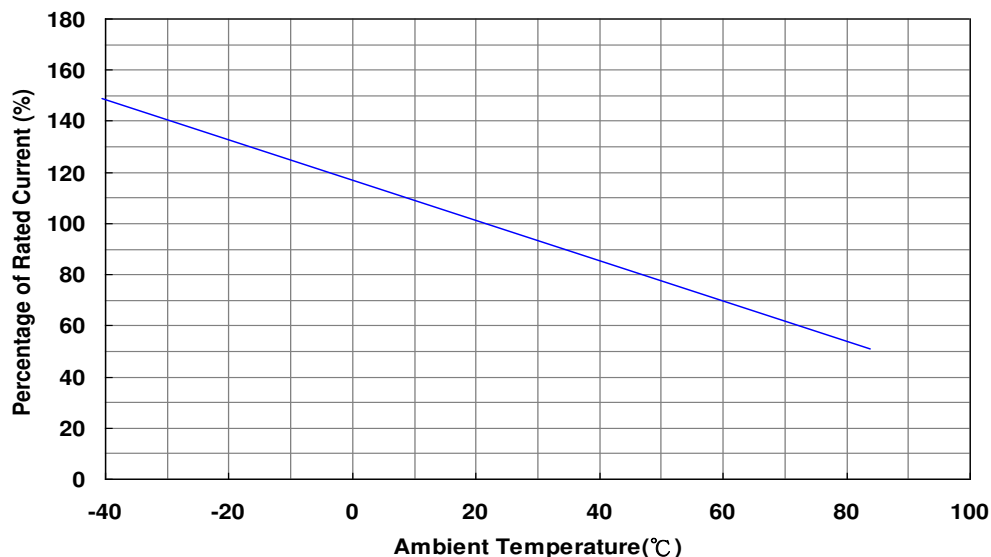
Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ KMC1S (0603) Series Ihold & Itrip Thermal Derating Curve

Derating Curve for KMC1S (0603) Series



KMC1S (0603) Series Ihold Thermal Derating Chart

(Unit: A)

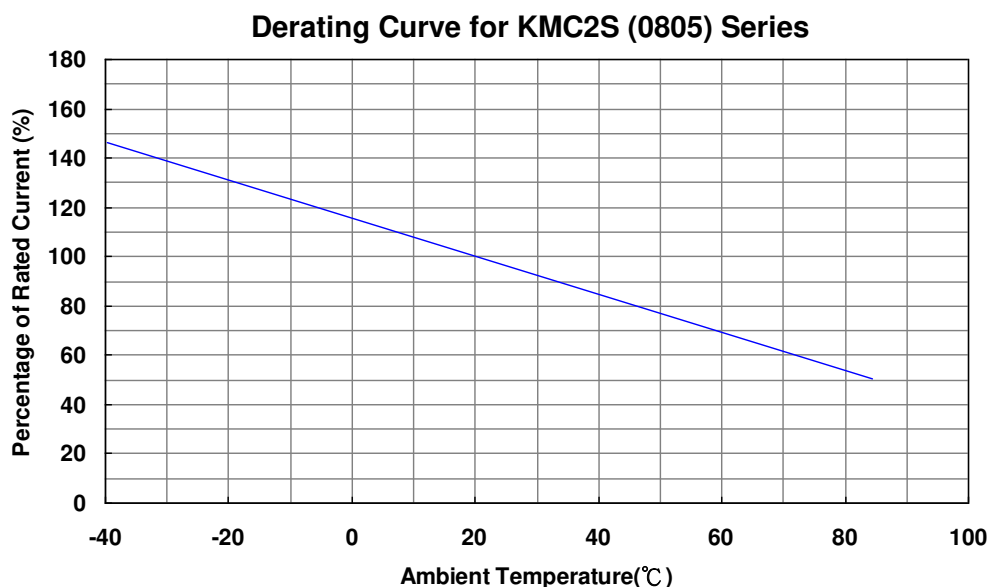
| Part No. | Ambient Temperature | | | | | | | | |
|----------|---------------------|-------|------|-------------|------|------|------|------|------|
| | -40°C | -20°C | 0°C | 23°C | 40°C | 50°C | 60°C | 70°C | 85°C |
| KMC1S010 | 0.13 | 0.12 | 0.11 | 0.10 | 0.08 | 0.07 | 0.06 | 0.05 | 0.03 |
| KMC1S020 | 0.27 | 0.25 | 0.23 | 0.20 | 0.17 | 0.14 | 0.12 | 0.10 | 0.07 |
| KMC1S025 | 0.32 | 0.29 | 0.27 | 0.25 | 0.21 | 0.18 | 0.16 | 0.14 | 0.10 |
| KMC1S035 | 0.47 | 0.41 | 0.38 | 0.35 | 0.29 | 0.26 | 0.24 | 0.20 | 0.14 |

Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ KMC2S (0805) Series Ihold & Itrip Thermal Derating Curve



KMC2S (0805) Series Ihold Thermal Derating Chart

(Unit: A)

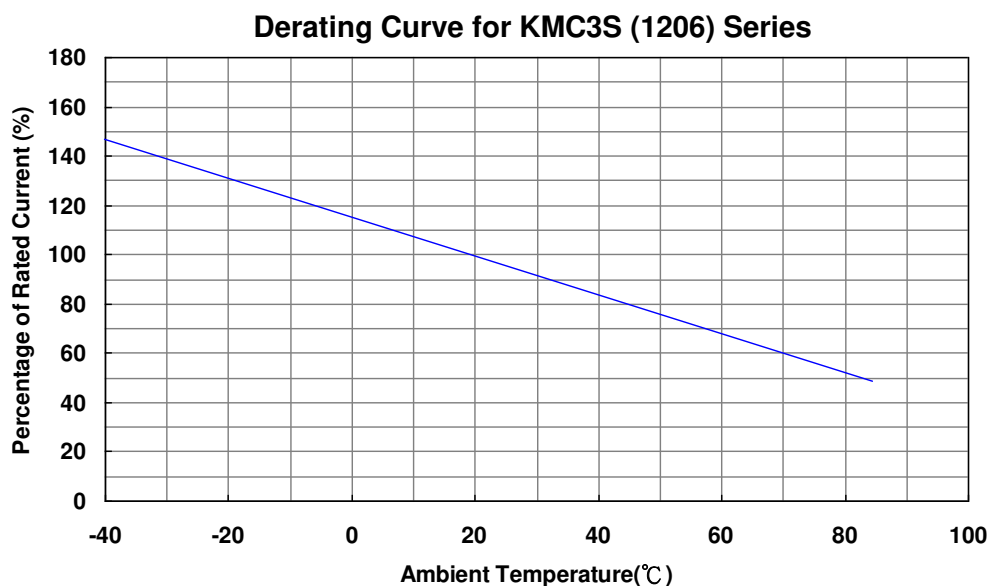
| Part No. | Ambient Temperature | | | | | | | | |
|-------------|---------------------|-------|------|-------------|------|------|------|------|------|
| | -40°C | -20°C | 0°C | 23°C | 40°C | 50°C | 60°C | 70°C | 85°C |
| KMC2S010 | 0.14 | 0.12 | 0.11 | 0.10 | 0.08 | 0.07 | 0.06 | 0.05 | 0.03 |
| KMC2S010-24 | 0.14 | 0.12 | 0.11 | 0.10 | 0.08 | 0.07 | 0.06 | 0.05 | 0.03 |
| KMC2S020 | 0.28 | 0.25 | 0.23 | 0.20 | 0.17 | 0.14 | 0.12 | 0.10 | 0.07 |
| KMC2S035 | 0.47 | 0.44 | 0.39 | 0.35 | 0.30 | 0.27 | 0.24 | 0.20 | 0.14 |
| KMC2S050 | 0.68 | 0.62 | 0.55 | 0.50 | 0.40 | 0.37 | 0.33 | 0.29 | 0.23 |
| KMC2S075 | 1.00 | 0.90 | 0.79 | 0.75 | 0.63 | 0.57 | 0.53 | 0.41 | 0.34 |
| KMC2S110 | 1.55 | 1.32 | 1.26 | 1.10 | 0.93 | 0.85 | 0.77 | 0.67 | 0.55 |

Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ KMC3S (1206) Series Ihold & Itrip Thermal Derating Curve



■ KMC3S (1206) Series Ihold Thermal Derating Chart

(Unit: A)

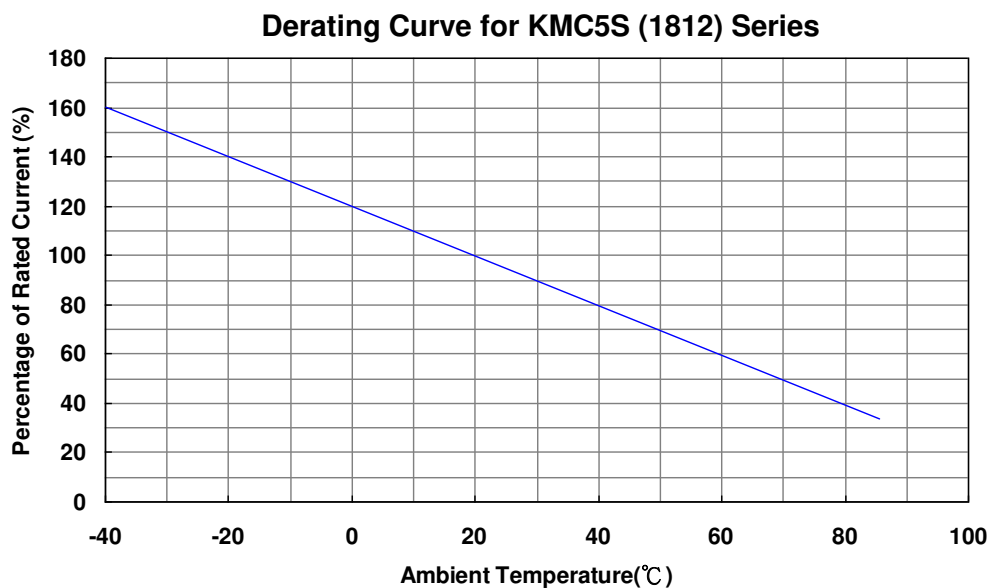
| Part no | Ambient Temperature | | | | | | | | |
|-------------|---------------------|-------|-------|-------------|-------|-------|-------|------|-------|
| | -40°C | -20°C | 0°C | 23°C | 40°C | 50°C | 60°C | 70°C | 85°C |
| KMC3S005 | 0.0725 | 0.063 | 0.057 | 0.05 | 0.043 | 0.038 | 0.035 | 0.03 | 0.026 |
| KMC3S010 | 0.145 | 0.133 | 0.115 | 0.10 | 0.085 | 0.075 | 0.07 | 0.06 | 0.055 |
| KMC3S012 | 0.20 | 0.17 | 0.15 | 0.12 | 0.11 | 0.10 | 0.09 | 0.08 | 0.07 |
| KMC3S016 | 0.21 | 0.20 | 0.18 | 0.16 | 0.14 | 0.13 | 0.12 | 0.11 | 0.09 |
| KMC3S020 | 0.34 | 0.30 | 0.26 | 0.20 | 0.17 | 0.15 | 0.13 | 0.11 | 0.08 |
| KMC3S025 | 0.37 | 0.33 | 0.29 | 0.25 | 0.22 | 0.20 | 0.17 | 0.15 | 0.12 |
| KMC3S035 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.27 | 0.24 | 0.18 | 0.15 |
| KMC3S050 | 0.71 | 0.64 | 0.57 | 0.50 | 0.42 | 0.39 | 0.35 | 0.31 | 0.25 |
| KMC3S050-15 | 0.71 | 0.64 | 0.57 | 0.50 | 0.42 | 0.39 | 0.35 | 0.31 | 0.25 |
| KMC3S075 | 1.14 | 1.01 | 0.88 | 0.75 | 0.65 | 0.59 | 0.54 | 0.49 | 0.41 |
| KMC3S100 | 1.45 | 1.31 | 1.15 | 1.00 | 0.84 | 0.77 | 0.69 | 0.61 | 0.48 |
| KMC3S110 | 1.64 | 1.46 | 1.30 | 1.06 | 0.92 | 0.83 | 0.80 | 0.65 | 0.52 |
| KMC3S150 | 2.18 | 1.94 | 1.72 | 1.50 | 1.28 | 1.17 | 1.06 | 0.96 | 0.77 |
| KMC3S200 | 2.92 | 2.64 | 2.35 | 2.00 | 1.79 | 1.64 | 1.50 | 1.22 | 1.14 |

Polymer PTC Resettable Fuse: KMC Series

SMD Type



■ KMC5S (1812) Series Ihold & Itrip Thermal Derating Curve



■ KMC5S (1812) Series Ihold Thermal Derating Chart

(Unit: A)

| Part no | Ambient Temperature | | | | | | | | |
|-------------|---------------------|-------|------|-------------|------|------|------|------|------|
| | -40°C | -20°C | 0°C | 23°C | 40°C | 50°C | 60°C | 70°C | 85°C |
| KMC5S010 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.07 | 0.06 | 0.05 | 0.03 |
| KMC5S014 | 0.23 | 0.19 | 0.17 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | 0.06 |
| KMC5S020 | 0.29 | 0.26 | 0.23 | 0.20 | 0.17 | 0.15 | 0.14 | 0.12 | 0.10 |
| KMC5S035 | 0.50 | 0.45 | 0.40 | 0.35 | 0.29 | 0.26 | 0.24 | 0.21 | 0.19 |
| KMC5S050 | 0.77 | 0.68 | 0.59 | 0.50 | 0.44 | 0.40 | 0.37 | 0.33 | 0.29 |
| KMC5S075 | 1.15 | 1.01 | 0.88 | 0.75 | 0.65 | 0.60 | 0.55 | 0.49 | 0.43 |
| KMC5S075-24 | 1.06 | 0.95 | 0.84 | 0.75 | 0.60 | 0.55 | 0.50 | 0.45 | 0.37 |
| KMC5S075-33 | 1.10 | 1.00 | 0.88 | 0.75 | 0.66 | 0.60 | 0.55 | 0.47 | 0.36 |
| KMC5S110 | 1.59 | 1.43 | 1.26 | 1.10 | 0.95 | 0.87 | 0.80 | 0.71 | 0.60 |
| KMC5S110-16 | 1.58 | 1.43 | 1.27 | 1.10 | 0.95 | 0.85 | 0.77 | 0.71 | 0.58 |
| KMC5S110-24 | 1.55 | 1.40 | 1.25 | 1.10 | 0.93 | 0.83 | 0.73 | 0.63 | 0.50 |
| KMC5S110-33 | 1.55 | 1.40 | 1.25 | 1.10 | 0.93 | 0.83 | 0.73 | 0.63 | 0.50 |
| KMC5S125 | 2.00 | 1.75 | 1.52 | 1.25 | 1.00 | 0.95 | 0.90 | 0.75 | 0.53 |
| KMC5S125-16 | 2.00 | 1.75 | 1.52 | 1.25 | 1.00 | 0.95 | 0.90 | 0.75 | 0.53 |
| KMC5S150 | 2.30 | 2.03 | 1.76 | 1.50 | 1.25 | 1.10 | 1.00 | 0.80 | 0.76 |
| KMC5S150-12 | 2.04 | 1.88 | 1.68 | 1.50 | 1.25 | 1.10 | 1.00 | 0.80 | 0.60 |
| KMC5S150-24 | 2.05 | 1.87 | 1.67 | 1.50 | 1.25 | 1.08 | 0.95 | 0.77 | 0.60 |
| KMC5S160 | 2.27 | 2.05 | 1.83 | 1.60 | 1.35 | 1.25 | 1.15 | 1.00 | 0.85 |
| KMC5S200 | 2.60 | 2.44 | 2.22 | 2.00 | 1.80 | 1.60 | 1.50 | 1.07 | 0.80 |
| KMC5S200-16 | 2.60 | 2.44 | 2.22 | 2.00 | 1.80 | 1.60 | 1.50 | 1.07 | 0.80 |
| KMC5S260 | 3.40 | 3.16 | 2.80 | 2.60 | 2.34 | 2.08 | 1.95 | 1.39 | 1.04 |
| KMC5S260-16 | 3.40 | 3.16 | 2.80 | 2.60 | 2.34 | 2.08 | 1.95 | 1.39 | 1.04 |
| KMC5S300 | 4.15 | 3.76 | 3.46 | 3.00 | 2.55 | 2.28 | 2.01 | 1.61 | 1.33 |

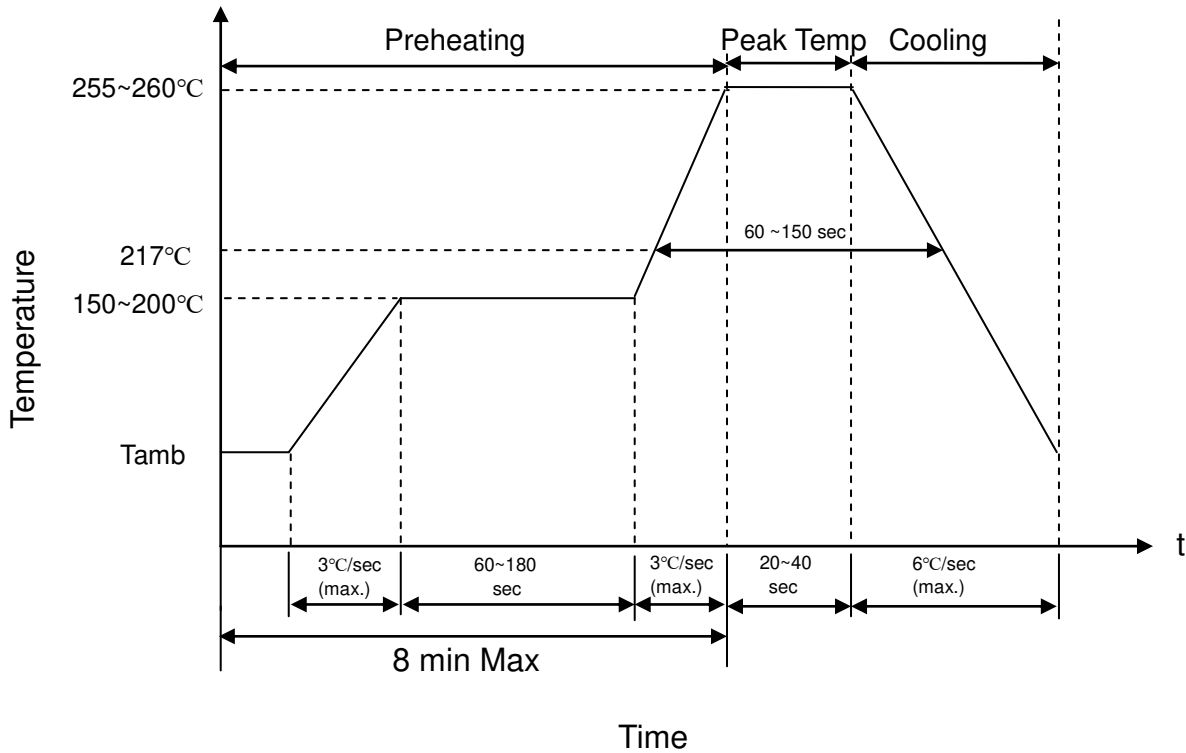
Polymer PTC Resettable Fuse: KMC Series

SMD Type



Recommended Soldering Condition

IR-Reflow Soldering Profile



- Welding method of the product is reflow welding, and wave soldering is not recommended.
- Recommended reflow methods: IR, vapor phase, and hot air oven.
- Devices can be cleaned by using standard industry methods and solvents.

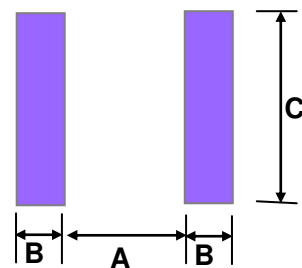
Note:

- If reflow temperature exceeds the recommended profile, devices may not meet the performance requirements.
- Devices are not designed to be wave soldered to the bottom side of the board.

Recommended Soldering Pad Dimensions (Nominal)

(Unit:mm)

| Series | Size | A | B | C |
|--------|------|------|------|------|
| KMC1S | 0603 | 0.80 | 1.00 | 1.00 |
| KMC2S | 0805 | 1.20 | 1.00 | 1.50 |
| KMC3S | 1206 | 2.00 | 1.00 | 1.90 |
| KMC5S | 1812 | 3.45 | 1.78 | 3.50 |



Polymer PTC Resettable Fuse: KMC Series

SMD Type

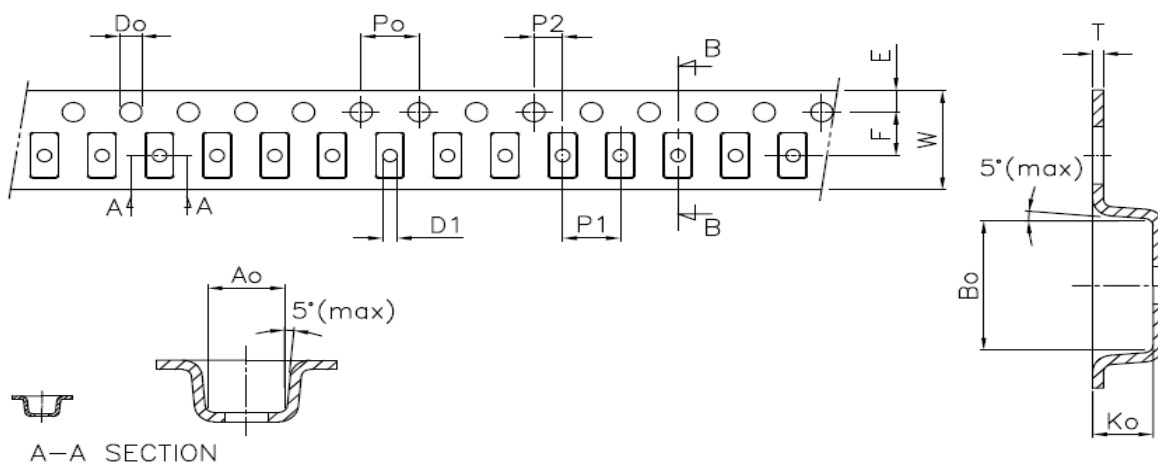


■ Reliability

| Item | Standard | Test Condition / Methods | Criteria |
|-----------------------------|------------------------|---|--|
| Passive Aging | IEC 60738-1 | 85±5°C, 1000±24hrs | ±10% typical resistance change |
| Humidity Aging | Specification Standard | 85±5°C, 80~85%RH, 100±5hrs | ±5% typical resistance change |
| Rapid Change of Temperature | IEC 60738-1 | 85±5/-40±5°C, 20 cycles, Duration:30min | -33% typical resistance change |
| Overload Endurance | UL 1434 | Vmax,120% Imax, 50 cycles Vmax,300% Itrip, 6000 cycles | No visible damage |
| Trip Endurance | UL 1434 | Vmax, Itrip ≤ I ≤ Imax, 1000±24hrs | No visible damage |
| Solderability | IEC 60068-2-58 | 245 ± 5 °C, 3 ± 0.3 sec | At least 95% of terminal electrode is covered by new solder. |

■ Package

● Taping Specification



◆ KMC1S Series: SMD 0603 Type

For KMC1S010, KMC1S020, KMC1S025

(Unit: mm)

| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|----------------|----------------|----------------|------------------|
| | ±0.05 | ±0.05 | ±0.05 | ±0.10 | ±0.10 | ±0.05 | ±0.05 | ±0.10 | ±0.05 | +0.10/-0 | +0.10 -0.05 | +0.30 -0.10 | ±0.20 |
| 0603 | 1.10 | 1.85 | 0.60 | 4.00 | 4.00 | 2.00 | 0.20 | 1.75 | 3.50 | 1.50 | 0.50 | 8.00 | 40.00 |

Polymer PTC Resettable Fuse: KMC Series



SMD Type

For KMC1S035

(Unit: mm)

| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|----------------|----------------|-------|------------------|
| | ±0.10 | ±0.15 | ±0.05 | ±0.10 | ±0.10 | ±0.05 | +0.05 -0.08 | ±0.10 | ±0.05 | ±0.05 | Min. | ±0.20 | ±0.20 |
| 0603 | 1.10 | 1.85 | 0.75 | 4.00 | 4.00 | 2.00 | 0.23 | 1.75 | 3.50 | 1.55 | 0.40 | 8.00 | 40.00 |

◆ KMC2S Series: SMD 0805 Type

(Unit: mm)

| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|----------------|----------------|-------|------------------|
| | ±0.10 | ±0.10 | ±0.05 | ±0.08 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.05 | ±0.05 | Min. | ±0.10 | ±0.20 |
| 0805 | 1.60 | 2.30 | 0.90 | 4.00 | 4.00 | 2.00 | 0.25 | 1.75 | 3.50 | 1.55 | 1.00 | 8.00 | 40.00 |

◆ KMC3S Series: SMD 1206 Type

For KMC3S005, KMC3S010, KMC3S050-15, KMC3S100, KMC3S110, KMC3S150, and KMC3S200

(Unit: mm)

| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|----------------|----------------|-------|------------------|
| | +0.1/-0 | +0.1/-0 | ±0.05 | ±0.10 | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.05 | Min. | ±0.30 | ±0.20 |
| 1206 | 1.95 | 3.55 | 1.40 | 4.00 | 4.00 | 2.00 | 0.23 | 1.75 | 3.50 | 1.55 | 1.00 | 8.00 | 40.00 |

For KMC3S012, KMC3S016, KMC3S020, KMC3S025, KMC3S035, KMC3S050, and KMC3S075

(Unit: mm)

| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|----------------|----------------|-------|------------------|
| | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.05 | Min. | ±0.30 | ±0.20 |
| 1206 | 1.85 | 3.45 | 0.85 | 4.00 | 4.00 | 2.00 | 0.23 | 1.75 | 3.50 | 1.55 | 1.00 | 8.00 | 40.00 |

◆ KMC5S Series: SMD 1812 Type

For KMC5S010, KMC5S014, KMC5S020, KMC5S075-24, KMC5S075-33, KMC5S110-16, KMC5S110-24, KMC5S110-33, KMC5S125-16, KMC5S150-12, KMC5S150-24, KMC5S200-16, KMC5S260, KMC5S260-16, and KMC5S300

(Unit: mm)

| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|----------------|----------------|-------|------------------|
| | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.05 | Min. | ±0.30 | ±0.20 |
| 1812 | 3.56 | 4.94 | 1.70 | 4.00 | 8.00 | 2.00 | 0.25 | 1.75 | 5.50 | 1.55 | 1.50 | 12.00 | 40.00 |

For KMC5S035, KMC5S050, KMC5S075, KMC5S110, KMC5S125, KMC5S150, KMC5S160, and KMC5S200

(Unit: mm)

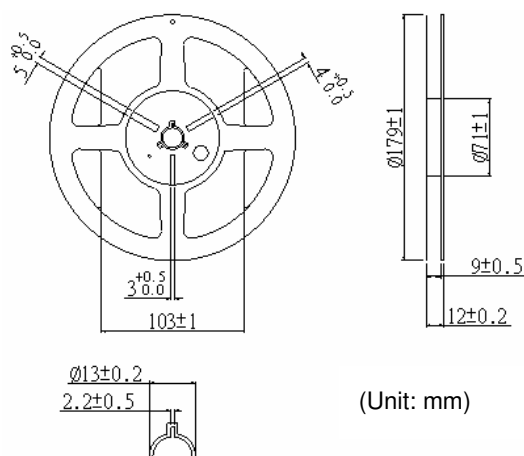
| Index Size | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | T | E | F | D ₀ | D ₁ | W | 10P ₀ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|----------------|----------------|-------|------------------|
| | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.10 | ±0.03 | ±0.10 | ±0.10 | ±0.05 | Min. | ±0.30 | ±0.20 |
| 1812 | 3.50 | 5.00 | 0.90 | 4.00 | 8.00 | 2.00 | 0.25 | 1.75 | 5.50 | 1.55 | 1.50 | 12.00 | 40.00 |

Polymer PTC Resettable Fuse: KMC Series

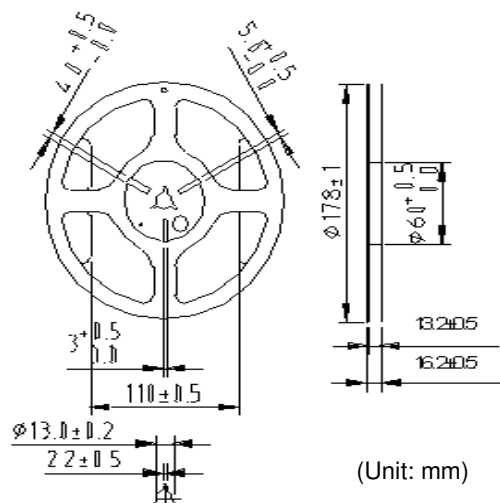
SMD Type



Quantity



| Size | Part no | Quantity (pcs/reel) |
|------|---|---------------------|
| 0603 | KMC1S010, KMC1S020, KMC1S025 | 6,000 |
| | KMC1S035 | 5,000 |
| 0805 | For all parts | 4,000 |
| 1206 | KMC3S005, KMC3S010, KMC3S050-15, KMC3S100, KMC3S110, KMC3S150, KMC3S200 | 2,500 |
| | KMC3S012, KMC3S016, KMC3S020, KMC3S025, KMC3S035, KMC3S050, KMC3S075 | 5,000 |



| Size | Part no | Quantity (pcs/reel) |
|------|--|---------------------|
| 1812 | KMC5S010, KMC5S014, KMC5S020, KMC5S075-24, KMC5S075-33, KMC5S110-16, KMC5S110-24, KMC5S110-33, KMC5S125-16, KMC5S150-12, KMC5S150-24, KMC5S200-16, KMC5S260, KMC5S260-16, KMC5S300 | 1,000 |
| | KMC5S035, KMC5S050, KMC5S075, KMC5S110, KMC5S125, KMC5S150, KMC5S160, KMC5S200 | 2,000 |

Warehouse Storage Conditions of Products

- Storage Conditions:
 - Storage Temperature: -10 °C ~ + 40 °C
 - Relative humidity: ≤ 75%RH
 - Thermistors must be kept away from sunlight and stored in a non-corrosive atmosphere.
- Period of Storage: 1 year