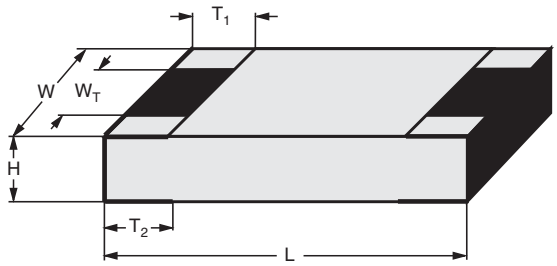
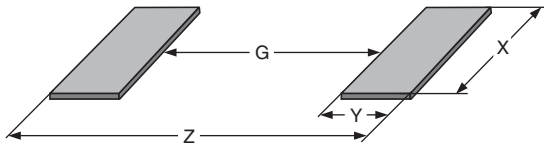
## DIMENSIONS




| DIMENSIONS - Chip fuse types, mass and relevant physical dimensions | | | | | | | |
|---|---|---|---|---|---|---|---|
| TYPE | H (mm) | L (mm) | W (mm) | $W_T$ (mm) | $T_1$ (mm) | $T_2$ (mm) | MASS (mg) |
| MFU 0402 | 0.32 ± 0.07 | 1.0 ± 0.05 | 0.5 ± 0.05 | > 75 % of W | 0.2 + 0.1/- 0.15 | 0.2 ± 0.1 | 0.65 |
| MFU 0603 | 0.45 + 0.1/- 0.05 | 1.55 ± 0.05 | 0.85 ± 0.1 | > 75 % of W | 0.3 + 0.15/- 0.2 | 0.3 + 0.15/- 0.2 | 1.9 |
| MFU 0805 | 0.45 + 0.1/- 0.05 | 2.0 ± 0.1 | 1.25 ± 0.15 | > 75 % of W | 0.4 + 0.1/- 0.2 | 0.4 + 0.1/- 0.2 | 4.7 |
| MFU 1206 | 0.55 ± 0.1 | 3.2 + 0.1/- 0.2 | 1.6 ± 0.15 | > 75 % of W | 0.5 ± 0.25 | 0.5 ± 0.25 | 9.5 |

## SOLDER PAD DIMENSIONS




| RECOMMENDED SOLDER PAD DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TYPE | WAVE SOLDERING | | | | REFLOW SOLDERING | | | |
| | G (mm) | Y (mm) | X (mm) | Z (mm) | G (mm) | Y (mm) | X (mm) | Z (mm) |
| MFU 0402 | - | - | - | - | 0.35 | 0.55 | 0.55 | 1.45 |
| MFU 0603 | 0.55 | 1.10 | 1.10 | 2.75 | 0.65 | 0.70 | 0.95 | 2.05 |
| MFU 0805 | 0.80 | 1.25 | 1.50 | 3.30 | 0.90 | 0.90 | 1.40 | 2.70 |
| MFU 1206 | 1.40 | 1.50 | 1.90 | 4.40 | 1.50 | 1.15 | 1.75 | 3.80 |

**Note**

- The given solder pad dimensions reflect the considerations for board design and assembly as outlined e.g. in standards IEC 61188-5-x, or in publication IPC-7351. They do not guarantee any supposed thermal properties, particularly as these are also strongly influenced by many other parameters.



For technical questions, contact: fuse@vishay.com

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| **MFU 0402 RATING** - Very quick acting (FF) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SIZE** | **FUSE CHAR.** | **RATED CURRENT** [1] | **RATED VOLTAGE** | **PRE-ARCING** [2] **$I^2t$ at 10 x $I_R$** | **VOLT. DROP** [2] **at 1 x $I_R$** | **COLD RESIS** [2] **at 0.1 x $I_R$** | **BREAKING CAPACITY DC** | **MARK.** | **APPROVAL** | **PART NUMBER** [3][4] |
| 0402 | FF | 500 mA [5] | 32 V | 0.0009 $A^2s$ | 368 mV | 560 mΩ | 50 A at 32 V | - | UL | MFU0402FF00500E500 |
| | | 630 mA [5] | 32 V | 0.0014 $A^2s$ | 331 mV | 400 mΩ | 50 A at 32 V | - | UL | MFU0402FF00630E500 |
| | | 750 mA [5] | 32 V | 0.0020 $A^2s$ | 275 mV | 280 mΩ | 50 A at 32 V | - | UL | MFU0402FF00750E500 |
| | | 800 mA | 32 V | 0.0023 $A^2s$ | 231 mV | 220 mΩ | 50 A at 32 V | - | UL | MFU0402FF00800E500 |
| | | 1.0 A | 32 V | 0.0028 $A^2s$ | 184 mV | 140 mΩ | 50 A at 32 V | - | UL | MFU0402FF01000E500 |
| | | 1.25 A | 32 V | 0.0039 $A^2s$ | 159 mV | 97 mΩ | 50 A at 32 V | - | UL | MFU0402FF01250E500 |
| | | 1.5 A | 32 V | 0.0059 $A^2s$ | 146 mV | 74 mΩ | 50 A at 32 V | - | UL | MFU0402FF01500E500 |
| | | 1.6 A | 32 V | 0.0065 $A^2s$ | 136 mV | 65 mΩ | 50 A at 32 V | - | UL | MFU0402FF01600E500 |
| | | 1.75 A | 32 V | 0.0077 $A^2s$ | 124 mV | 54 mΩ | 50 A at 32 V | - | UL | MFU0402FF01750E500 |
| | | 2.0 A | 32 V | 0.0101 $A^2s$ | 115 mV | 44 mΩ | 50 A at 32 V | - | UL | MFU0402FF02000E500 |
| | | 2.5 A | 32 V | 0.0157 $A^2s$ | 107 mV | 33 mΩ | 50 A at 32 V | - | UL | MFU0402FF02500E500 |
| | | 3.0 A | 32 V | 0.0227 $A^2s$ | 95 mV | 24 mΩ | 50 A at 32 V | - | UL | MFU0402FF03000E500 |
| | | 3.15 A | 32 V | 0.0250 $A^2s$ | 90 mV | 22 mΩ | 50 A at 32 V | - | UL | MFU0402FF03150E500 |

**Notes**

(1) Other values of rated current are available on request
(2) Typical values
(3) For packages with 1000 pieces, please use for packaging E1 instead of E5
(4) For packages with 10 000 pieces, please use for packaging E0 instead of E5
(5) Available on request

| **MFU 0603 RATING** - Very quick acting (FF) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SIZE** | **FUSE CHAR.** | **RATED CURRENT** [6] | **RATED VOLTAGE** | **PRE-ARCING** [7] **$I^2t$ at 10 x $I_R$** | **VOLT. DROP** [7] **at 1 x $I_R$** | **COLD RESIS** [7] **at 0.1 x $I_R$** | **BREAKING CAPACITY DC** | **MARK.** | **APPROVAL** | **PART NUMBER** [8][9] |
| 0603 | FF | 500 mA | 32 V | 0.0009 $A^2s$ | 361 mV | 550 mΩ | 50 A at 32 V | F | UL/IEC | MFU0603FF00500P500 |
| | | 630 mA | 32 V | 0.0014 $A^2s$ | 331 mV | 400 mΩ | 50 A at 32 V | CT | UL | MFU0603FF00630P500 |
| | | 750 mA | 32 V | 0.0020 $A^2s$ | 258 mV | 262 mΩ | 50 A at 32 V | G | UL | MFU0603FF00750P500 |
| | | 800 mA | 32 V | 0.0023 $A^2s$ | 249 mV | 237 mΩ | 50 A at 32 V | CV | UL | MFU0603FF00800P500 |
| | | 1.0 A | 32 V | 0.0028 $A^2s$ | 223 mV | 170 mΩ | 50 A at 32 V | H | UL/IEC | MFU0603FF01000P500 |
| | | 1.25 A | 32 V | 0.0039 $A^2s$ | 180 mV | 110 mΩ | 50 A at 32 V | J | UL | MFU0603FF01250P500 |
| | | 1.5 A | 32 V | 0.0059 $A^2s$ | 155 mV | 79 mΩ | 50 A at 32 V | K | UL | MFU0603FF01500P500 |
| | | 1.6 A | 32 V | 0.0065 $A^2s$ | 159 mV | 76 mΩ | 50 A at 32 V | EF | UL/IEC | MFU0603FF01600P500 |
| | | 1.75 A | 32 V | 0.0077 $A^2s$ | 138 mV | 60 mΩ | 50 A at 32 V | L | UL | MFU0603FF01750P500 |
| | | 2.0 A | 32 V | 0.0101 $A^2s$ | 150 mV | 57 mΩ | 50 A at 32 V | N | UL/IEC | MFU0603FF02000P500 |
| | | 2.5 A | 32 V | 0.0157 $A^2s$ | 121 mV | 37 mΩ | 50 A at 32 V | O | UL | MFU0603FF02500P500 |
| | | 3.0 A | 32 V | 0.0227 $A^2s$ | 126 mV | 32 mΩ | 50 A at 32 V | P | UL | MFU0603FF03000P500 |
| | | 3.15 A | 32 V | 0.0250 $A^2s$ | 120 mV | 29 mΩ | 50 A at 32 V | EL | UL/IEC | MFU0603FF03150P500 |
| | | 3.5 A | 32 V | 0.0308 $A^2s$ | 106 mV | 23 mΩ | 50 A at 32 V | R | UL | MFU0603FF03500P500 |
| | | 4.0 A | 32 V | 0.0403 $A^2s$ | 100 mV | 19 mΩ | 50 A at 32 V | S | UL | MFU0603FF04000P500 |
| | | 5.0 A | 32 V | 0.2275 $A^2s$ | 85 mV | 13 mΩ | 50 A at 32 V | T | UL | MFU0603FF05000P500 |

**Notes**

(6) Other values of rated current are available on request
(7) Typical values
(8) For packages with 1000 pieces, please use for packaging P1 instead of P5
(9) For packages with 20 000 pieces, please use for packaging PW instead of P5


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