



SMD CHIP FUSE

MFU Series



SMD Chip Fuse for Secondary Over-Current Protection

KEY BENEFITS

- Circuit protection
- Very quick acting fuse characteristics
- Outstanding stability of fusing characteristics
- Supports lead (Pb)-free soldering
- Meets requirements of IEC 60127-4 and UL 248-14
- Standard metric SMD sizes

APPLICATIONS

- Information technology
- Industrial electronics
- Automotive electronics
- Telecommunication
- Medical equipment
- Audio/video electronics

Datasheet is available on our web site at www.vishay.com
for MFU Series - <http://www.vishay.com/doc?28747>

Thin Film Flat Chip Fuses

FEATURES

- Advanced thin film technology
- Very quick acting fuse characteristics
- Outstanding stability of fusing characteristics
- Standard metric SMD sizes
- Green product, supports lead (Pb)-free soldering

APPLICATIONS

- Information technology
- Industrial electronics
- Automotive electronics
- Telecommunication
- Medical equipment
- Audio/video electronics



MFU Thin Film Flat Chip Fuses are the perfect choice for the most fields of modern electronics. The highly controlled manufacturing thin film process guarantees an outstanding stability of fusing characteristics. Typical applications include information technology, telecommunication, medical equipment, industrial, audio/video, and automotive electronics.

| METRIC SIZE | |
|-------------|-------------------------------------|
| INCH: | 0402 0603 0805 1206 |
| METRIC: | RR 1005M RR 1608M RR 2012M RR 3216M |

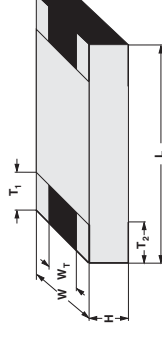
TECHNICAL SPECIFICATION

| DESCRIPTION | MFU 0402 | MFU 0603 | MFU 0805 | MFU 1206 |
|--|------------------|---------------------------------|---------------------------------|---------------------------------|
| Metric size | RR 1005M | RR 1608M | RR 2012M | RR 3216M |
| Rated Current range I_R | 0.5 A to 2.0 A | 0.5 A to 5.0 A | 0.5 A to 5.0 A | 0.5 A to 6.3 A |
| Rated voltage, U_{max} DC | 32 V | 32 V | 32 V | 63 V |
| Breaking Capacity, I_{max} at U_{max} DC | 50 A at 32 V | 50 A at 32 V | 50 A at 32 V | 50 A at 63 V |
| Voltage drop at 1 x I_R | 115 mV to 420 mV | 85 mV to 361 mV | 98 mV to 374 mV | 116 mV to 435 mV |
| Cold resistance at 0.1 x I_R | 44 mΩ to 640 mΩ | 13 mΩ to 550 mΩ | 15 mΩ to 570 mΩ | 14 mΩ to 660 mΩ |
| Climatic category (LCTUCT/days) | 55/125/56 | 55/125/56 | 55/125/56 | 55/125/56 |
| Permissible continuous current rating at $\theta_{amb} = 23^\circ\text{C}$ | 0.7 x I_R | 0.7 x I_R | 0.7 x I_R | 0.7 x I_R |
| UL recognition file | E253806 | E253806 | E253806 | E253806 |
| Approval | IEC 60127-4 | Refer to Table: MFU 0603 RATING | Refer to Table: MFU 1206 RATING | Refer to Table: MFU 1206 RATING |

NOTICE Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc. or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

For technical questions, contact ff3eresistors@vishay.com

DIMENSIONS

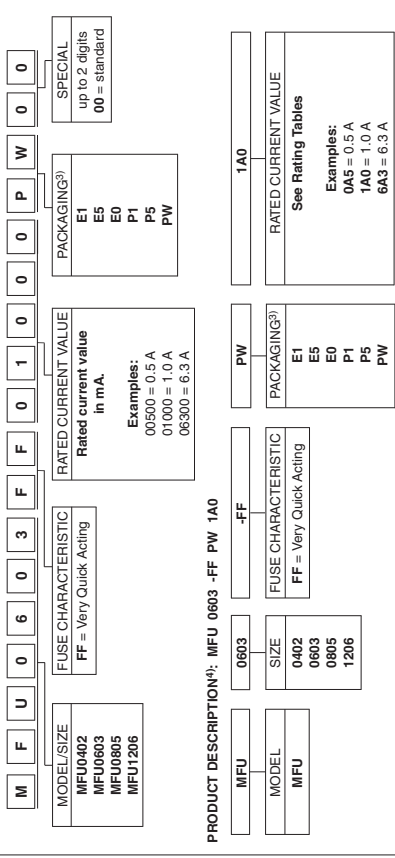


DIMENSIONS - Chip Fuse types, mass and relevant physical dimensions

| TYPE | H (mm) | L (mm) | W (mm) | Wt (mm) | T ₁ (mm) | T ₂ (mm) | MASS (mg) |
|----------|-------------------|-----------------|-------------|-------------|---------------------|---------------------|-----------|
| MFU 0402 | 0.32 ± 0.05 | 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 |

PART NUMBER AND PRODUCT DESCRIPTION MFU SERIES!

PART NUMBER²⁾: MFU0603FF01000PW00



Notes

1. Products can be ordered using either the PART NUMBER or the PRODUCT DESCRIPTION.
2. The PART NUMBER is shown to facilitate the introduction of a unified part numbering system.
3. Please refer to table PACKAGING.
4. We recommend that the PRODUCT DESCRIPTION is used to minimize the possibility of errors in order handling.

Revision 29-Jan-07