

Thin Film Chip Fuses



MFU Thin Film 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.

FEATURES

- Advanced thin film technology
- Very quick acting fuse characteristics
- Outstanding stability of fusing characteristics
- Green product, supports lead (Pb)-free soldering
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

APPLICATIONS

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

SIZE

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

TECHNICAL SPECIFICATIONS

| DESCRIPTION | MFU 0402 | MFU 0603 | MFU 0805 | MFU 1206 |
|--------------------------------------------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|
| Metric size | 1005M | 1608M | 2012M | 3216M |
| Rated current range I_R | 0.5 A to 3.15 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 $1 \times I_R$ | 90 mV to 368 mV | 85 mV to 361 mV | 98 mV to 374 mV | 116 mV to 433 mV |
| Cold resistance at $0.1 \times I_R$ | 22 m Ω to 560 m Ω | 13 m Ω to 550 m Ω | 15 m Ω to 570 m Ω | 14 m Ω to 660 m Ω |
| Permissible film temperature, $\vartheta_{F max}$. | 125 °C | | | |
| Operating temperature range | - 55 °C to 125 °C | | | |
| Permissible continuous current rating at $\vartheta_{amb} = 23$ °C | 0.7 $\times I_R$ | | | |
| Approval UL recognition file | E253806 | | | |
| Approval IEC 60127-4 | n/a | Refer to table: MFU 0603 RATING | | Refer to table: MFU 1206 RATING |
| FIT _{observed} | $\leq 0.2 \times 10^{-9}/h$ | | | |



PART NUMBER AND PRODUCT DESCRIPTION (1)

Part Number: MFU0603FF0100PW00

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M | F | U | 0 | 6 | 0 | 3 | F | F | 0 | 1 | 0 | 0 | 0 | P | W | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | |
|------------------------------------------|------------------------|-----------------------------------------------------------------------------------|----------------------------------|---------------------------------|
| MODEL/SIZE | FUSING CHARACTERISTIC | RATED CURRENT | PACKAGING (2) | SPECIAL |
| MFU0402 MFU0603 MFU0805 MFU1206 | FF = Very quick acting | Examples: 0.5 A = 00500 1.0 A = 01000 6.3 A = 06300 | E1 E5 E0 P1 P5 PW | Up to 2 digits 00 = Standard |

Product Description: MFU 0603 -FF PW 1A0

| | | | | |
|-------|------------------------------|------------------------|----------------------------------|-----------------------------------------------------------------------------|
| MFU | 0603 | -FF | PW | 1A0 |
| MODEL | SIZE | FUSING CHARACTERISTIC | PACKAGING (2) | RATED CURRENT |
| MFU | 0402 0603 0805 1206 | FF = Very quick acting | E1 E5 E0 P1 P5 PW | Examples: 0.5 A = 0A5 1.0 A = 1A0 6.3 A = 6A3 |

Notes

- (1) Products can be ordered using either the PART NUMBER or the PRODUCT DESCRIPTION
- (2) Please refer to table PACKAGING

| PACKAGING | | | | | | | | |
|-----------|------|----------|-----------------------------------------------|-------|-------|---------------|-----------|-----------|
| TYPE | CODE | QUANTITY | CARRIER TAPE | WIDTH | PITCH | REEL DIAMETER | | |
| MFU 0402 | E1 | 1000 | Card board tape acc. IEC 60286-3 Type I | 8.0 | 2.0 | 180 mm/7" | | |
| | E5 | 5000 | | | | | | |
| | E0 | 10 000 | | | | | | |
| MFU 0603 | P1 | 1000 | | | 4.0 | 8.0 | 180 mm/7" | |
| | P5 | 5000 | | | | | | |
| | PW | 20 000 | | | | | | |
| MFU 0805 | P1 | 1000 | | 4.0 | 8.0 | | | 180 mm/7" |
| | P5 | 5000 | | | | | | |
| | PW | 20 000 | | | | | | |
| MFU 1206 | P1 | 1000 | | 4.0 | | 8.0 | 180 mm/7" | |
| | P5 | 5000 | | | | | | |
| | PW | 20 000 | | | | | | |