

AXICOM

Telecom-, Signal and RF Relays

FT2/FU2 Relay

FT2/FU2 Relay

Disclaimer

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The dimensions in this datasheet are for reference purpose only and are subject to change without notice. Specifications are subject to change without notice.



UL 508 File No. E 111441
UL 60950

IEC/EN60950

IEC Ref. Cert. No. 3268

Index

| | |
|------------------------------------|----|
| Dimensions | 4 |
| Coil Operating Range | 5 |
| Coil Data and Ordering Information | 6 |
| Contact Data | 9 |
| Insulation | 10 |
| General Data | 10 |
| Packing | 12 |

FT2/FU2 Relay

2 pole telecom/signal relay
Through Hole Type (THT)
Surface Mount Typ (SMT)
Non-polarized, non-latching 1 coil

ROHS compliant (Directive 2002/95/EC) as per product date code 0427.

Features

- Telecom/signal relay (dry circuit, test access, ringing)
- Slim line 15 x 7.5 mm, 0.59 x 0.295 inch
- Switching current 2 A
- 2 changeover contacts (2 form C / DPDT)
- Bifurcated contacts
- High sensitive 24 V and 48 V coil versions
- Meets Telcordia GR 1089, FCC Part 68 and ITU-T K20 ≥ 2500 V between coil and contacts

Typical applications

- Communications equipment
Linecard application – analog, ISDN, xDSL, PABX
Voice over IP
- Office and business equipment
- Measurement and control equipment
- Consumer electronics
Set top boxes, HiFi
- Medical equipment

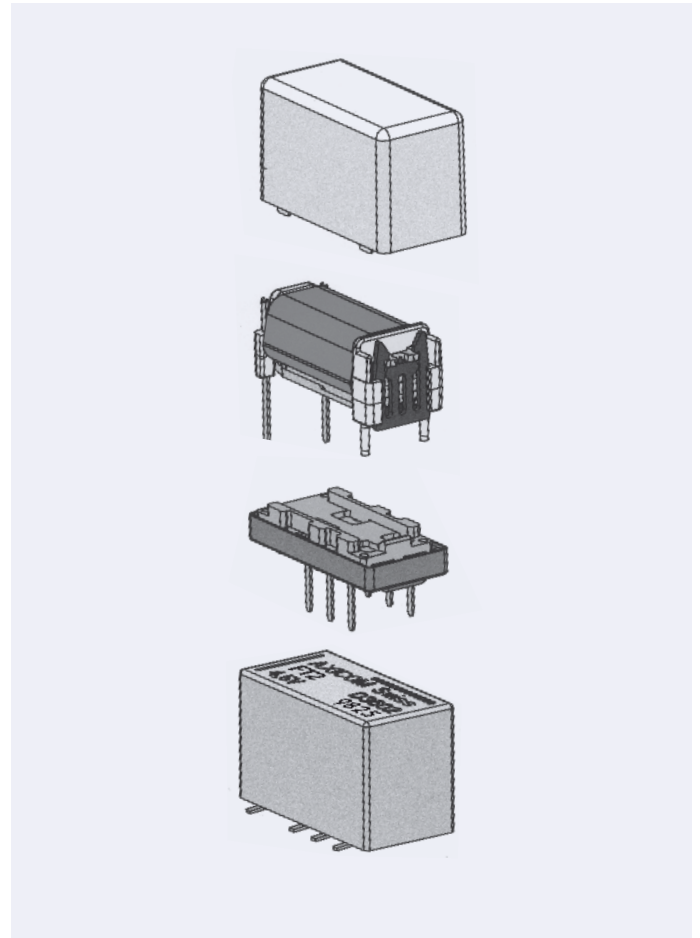
Options

- High Dielectric Version (HDV) with > 6000 V surge voltage between coil and contacts
- Suitable for 125 °C ambient temperature

Insulation category

Supplementary insulation according IEC / EN 60950 and UL 60950

| | |
|-------------------------------|----------------------------|
| Working voltage | ≤ 300 Vrms |
| Mains supply voltage | ≤ 250 Vrms |
| Repetitive peak voltage | 1500 V |
| Pollution degree | Internal: 1 External: 2 |
| Flammability classification | V-0 |
| Maximum operating temperature | 85 °C |



FT2/FU2 Relay

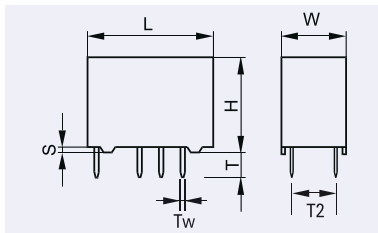
Dimensions

Dimensions in mm

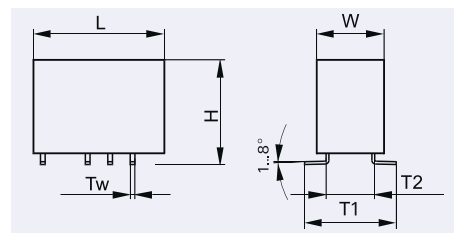
| | FT2 THT | | FU2 SMT long terminals | | FU2 SMT short terminals | |
|----|-------------|---------------|------------------------|---------------|-------------------------|---------------|
| | mm | inch | mm | inch | mm | inch |
| L | 15.0 ± 0.05 | 0.590 ± 0.002 | 15.0 ± 0.05 | 0.590 ± 0.002 | 15.0 ± 0.05 | 0.590 ± 0.002 |
| W | 7.5 ± 0.05 | 0.295 ± 0.002 | 7.5 ± 0.05 | 0.295 ± 0.002 | 7.6 ± 0.05 | 0.295 ± 0.002 |
| H | 9.6 ± 0.03 | 0.377 ± 0.001 | 10.0 ± 0.15 | 0.393 ± 0.006 | 10.0 ± 0.15 | 0.393 ± 0.006 |
| T | 3.30 ± 0.30 | 0.129 ± 0.011 | N/A | N/A | N/A | N/A |
| T1 | N/A | N/A | 9.2 ± 0.2 | 0.362 ± 0.008 | 7.5 ± 0.2 | 0.295 ± 0.008 |
| T2 | 5.08 | 0.200 | 5.08 | 0.200 | 5.08 | 0.200 |
| Tw | 0.50 | 0.020 | 0.50 | 0.020 | 0.50 | 0.020 |
| S | 0.35 ± 0.03 | 0.013 ± 0.001 | N/A | N/A | N/A | N/A |

FT2: THT Version

FU2: SMT Version

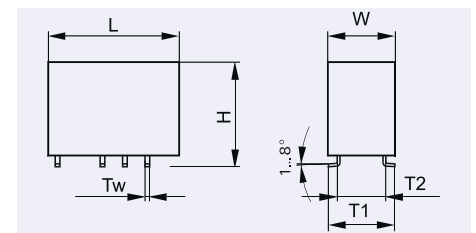


Long terminals (W)



Coplanarity ≤ 0.1mm

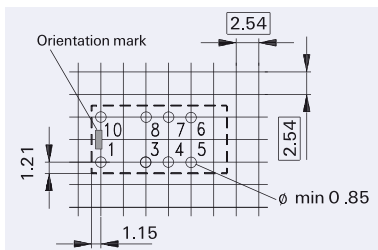
Short terminals (N)



Coplanarity ≤ 0.1mm

Mounting hole layout

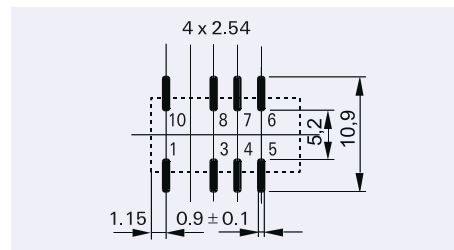
View onto the component side of the PCB (top view)



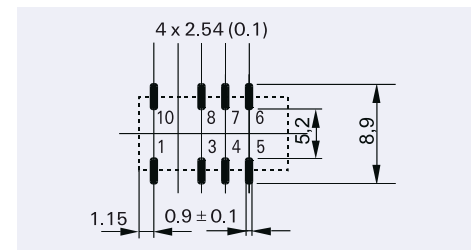
Solder pad layout

View onto the component side of the PCB (top view)

Long terminals



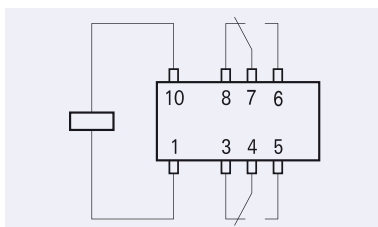
Short terminals



Terminal assignment

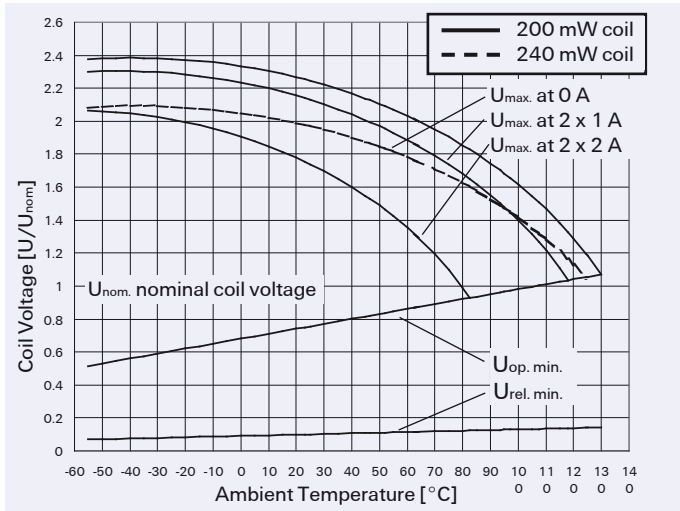
Relay – top view

Non-latching 1 coil
not energized condition



FT2/FU2 Relay

Coil Operating Range

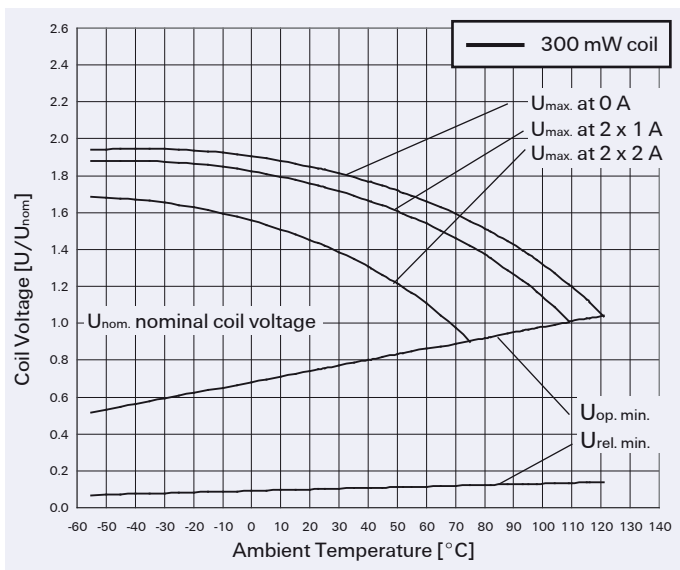


U_{nom} = Nominal coil voltage

U_{max}. = Upper limit of the operative range of the coil voltage (limiting voltage) when coils are continuously energized

U_{op. min.} = Lower limit of the operative range of the coil voltage (reliable operate voltage)

U_{rel. min.} = Lower limit of the operative range of the coil voltage (reliable release voltage)



FT2/FU2 Relay

Coil Data (values at 23 °C)

Ordering Information

| Nominal voltage Unom | Operate/set voltage range | | Release/ reset voltage Minimum | Coil power | Coil Resistance | Relay code | Tyco part number |
|-------------------------|---------------------------|-------------------------|--------------------------------------|---------------|---------------------|---------------|---------------------|
| | Minimum voltage Umin | Maximum voltage Umax | | | | | |
| Vdc | Vdc | Vdc | Vdc | mW | $\Omega / \pm 10\%$ | | |

Sensitive Version

THT non-latching

| | | | | | | | |
|-----|-------|------|------|-----|------|-------|-------------|
| 3 | 2.25 | 6.8 | 0.30 | 200 | 45 | D3421 | 1462035-9 |
| 4 | 3.00 | 9.0 | 0.40 | 200 | 80 | D3429 | 1-1462035-9 |
| 4.5 | 3.38 | 10.1 | 0.45 | 200 | 101 | D3422 | 1-1462035-0 |
| 5 | 3.75 | 11.2 | 0.50 | 200 | 125 | D3423 | 1-1462035-1 |
| 6 | 4.50 | 13.5 | 0.60 | 200 | 180 | D3424 | 1-1462035-2 |
| 9 | 6.75 | 20.3 | 0.90 | 200 | 405 | D3425 | 1-1462035-3 |
| 12 | 9.00 | 27.0 | 1.20 | 200 | 720 | D3426 | 1-1462035-4 |
| 24 | 18.00 | 47.5 | 2.40 | 240 | 2400 | D3427 | 1-1462035-7 |
| 48 | 36.00 | 95.0 | 4.80 | 240 | 9600 | D3428 | 1-1462035-8 |

SMT Long Terminals, non-latching

| | | | | | | | |
|-----|-------|------|------|-----|------|--------|-------------|
| 3 | 2.25 | 6.8 | 0.30 | 200 | 45 | D3521W | 1-1462036-8 |
| 4 | 3.00 | 9.0 | 0.40 | 200 | 80 | D3529W | 3-1462036-1 |
| 4.5 | 3.38 | 10.1 | 0.45 | 200 | 101 | D3522W | 2-1462036-0 |
| 5 | 3.75 | 11.2 | 0.50 | 200 | 125 | D3523W | 2-1462036-2 |
| 6 | 4.50 | 13.5 | 0.60 | 200 | 180 | D3524W | 2-1462036-4 |
| 9 | 6.75 | 20.3 | 0.90 | 200 | 405 | D3525W | 2-1462036-6 |
| 12 | 9.00 | 27.0 | 1.20 | 200 | 720 | D3526W | 2-1462036-8 |
| 24 | 18.00 | 47.5 | 2.40 | 240 | 2400 | D3527W | 9-1462036-1 |
| 48 | 36.00 | 95.0 | 4.80 | 240 | 9600 | D3528W | 9-1462036-5 |

SMT Short Terminals, non-latching

| | | | | | | | |
|-----|-------|------|------|-----|------|--------|-------------|
| 3 | 2.25 | 6.8 | 0.30 | 200 | 45 | D3521N | 1-1462036-7 |
| 4 | 3.00 | 9.0 | 0.40 | 200 | 80 | D3529N | 3-1462036-0 |
| 4.5 | 3.38 | 10.1 | 0.45 | 200 | 101 | D3522N | 1-1462036-9 |
| 5 | 3.75 | 11.2 | 0.50 | 200 | 125 | D3523N | 2-1462036-1 |
| 6 | 4.50 | 13.5 | 0.60 | 200 | 180 | D3524N | 2-1462036-3 |
| 9 | 6.75 | 20.3 | 0.90 | 200 | 405 | D3525N | 2-1462036-5 |
| 12 | 9.00 | 27.0 | 1.20 | 200 | 720 | D3526N | 2-1462036-7 |
| 24 | 18.00 | 47.5 | 2.40 | 240 | 2400 | D3527N | 2-1462036-9 |
| 48 | 36.00 | 95.0 | 4.80 | 240 | 9600 | D3528N | 9-1462036-3 |

Further coil versions are available on request.

FT2/FU2 Relay

Coil Data (values at 23 °C)

Ordering Information

| Nominal voltage Unom | Operate/set voltage range | | Release/ reset voltage Minimum | Coil power | Coil Resistance | Relay code | Tyco part number |
|-------------------------|---------------------------|----------------------|--------------------------------------|------------|-----------------|------------|------------------|
| | Minimum voltage Umin | Maximum voltage Umax | | | | | |
| Vdc | Vdc | Vdc | Vdc | mW | Ω / ± 10 % | | |

High Dielectric Version

THT non-latching, Sensitive Version

| | | | | | | | |
|----|-------|-------|------|-----|------|--------|-------------|
| 3 | 2.25 | 6.80 | 0.30 | 200 | 45 | D3491L | 2-1462035-7 |
| 5 | 3.75 | 11.20 | 0.50 | 200 | 125 | D3493L | 2-1462035-8 |
| 12 | 9.00 | 27.00 | 1.20 | 200 | 720 | D3496 | 2-1462035-4 |
| 24 | 18.00 | 47.50 | 2.40 | 240 | 2400 | D3497 | 2-1462035-5 |

SMT Short Terminals, non-latching, Sensitive Version

| | | | | | | | |
|----|------|-------|------|-----|-----|--------|-------------|
| 3 | 2.25 | 6.80 | 0.30 | 200 | 45 | D3591N | 7-1462035-7 |
| 5 | 3.75 | 11.20 | 0.50 | 200 | 125 | D3593N | 7-1462035-8 |
| 12 | 9.00 | 27.00 | 1.20 | 200 | 720 | D3596N | 7-1462035-9 |

SMT Long Terminals, non-latching, Sensitive Version

| | | | | | | | |
|----|------|-------|------|-----|-----|--------|-------------|
| 3 | 2.25 | 6.80 | 0.30 | 200 | 45 | D3591W | 9-1462036-7 |
| 5 | 3.75 | 11.20 | 0.50 | 200 | 125 | D3593W | 9-1462036-8 |
| 12 | 9.00 | 27.00 | 1.20 | 200 | 720 | D3596W | 9-1462036-9 |

High Dielectric Version - IEC 60950 (Australia)

SMT Short Terminals, non-latching, Standard Version

| | | | | | | | |
|----|------|-------|------|-----|-----|--------|-------------|
| 3 | 2.25 | 5.50 | 0.30 | 300 | 30 | D3571N | 7-1462035-5 |
| 5 | 3.75 | 9.20 | 0.50 | 300 | 83 | D3573N | 7-1462035-6 |
| 12 | 9.00 | 22.10 | 1.20 | 300 | 480 | D3576N | 7-1462035-3 |

SMT Long Terminals, non-latching, Standard Version

| | | | | | | | |
|----|------|-------|------|-----|-----|--------|-------------|
| 3 | 2.25 | 5.50 | 0.30 | 300 | 30 | D3571W | 7-1462035-1 |
| 5 | 3.75 | 9.20 | 0.50 | 300 | 83 | D3573W | 7-1462035-2 |
| 12 | 9.00 | 22.10 | 1.20 | 300 | 480 | D3576W | 7-1462035-4 |

Further coil versions are available on request.

FT2/FU2 Relay

Coil Data (values at 23 °C)

Ordering Information

| Nominal voltage Unom | Operate/set voltage range | | Release/ reset voltage Minimum | Coil power | Coil Resistance | Relay code | Tyco part number |
|-------------------------|---------------------------|-------------------------|--------------------------------------|---------------|--------------------|---------------|---------------------|
| | Minimum voltage Umin | Maximum voltage Umax | | | | | |
| Vdc | Vdc | Vdc | Vdc | mW | Ω / ± 10 % | | |

Standard Version

THT non-latching

| | | | | | | | |
|-----|-------|------|------|-----|------|-------|-----------|
| 3 | 2.25 | 5.5 | 0.30 | 300 | 30 | D3401 | 1462035-1 |
| 4.5 | 3.38 | 8.3 | 0.45 | 300 | 68 | D3402 | 1462035-2 |
| 5 | 3.75 | 9.2 | 0.50 | 300 | 83 | D3403 | 1462035-3 |
| 6 | 4.50 | 11.0 | 0.60 | 300 | 120 | D3404 | 1462035-4 |
| 9 | 6.75 | 16.6 | 0.90 | 300 | 270 | D3405 | 1462035-5 |
| 12 | 9.00 | 22.1 | 1.20 | 300 | 480 | D3406 | 1462035-6 |
| 24 | 18.00 | 44.2 | 2.40 | 300 | 1920 | D3407 | 1462035-7 |
| 48 | 36.00 | 88.3 | 4.80 | 300 | 7680 | D3408 | 1462035-8 |

SMT Long Terminals non-latching

| | | | | | | | |
|-----|-------|------|------|-----|------|--------|-------------|
| 3 | 2.25 | 5.5 | 0.30 | 300 | 30 | D3401W | 1462036-2 |
| 4.5 | 3.38 | 8.3 | 0.45 | 300 | 68 | D3402W | 1462036-4 |
| 5 | 3.75 | 9.2 | 0.50 | 300 | 83 | D3403W | 1462036-6 |
| 6 | 4.50 | 11.0 | 0.60 | 300 | 120 | D3404W | 1462036-8 |
| 9 | 6.75 | 16.6 | 0.90 | 300 | 270 | D3405W | 1-1462036-0 |
| 12 | 9.00 | 22.1 | 1.20 | 300 | 480 | D3406W | 1-1462036-2 |
| 24 | 18.00 | 44.2 | 2.40 | 300 | 1920 | D3407W | 1-1462036-4 |
| 48 | 36.00 | 88.3 | 4.80 | 300 | 7680 | D3408W | 1-1462036-6 |

SMT Short Terminals non-latching

| | | | | | | | |
|-----|-------|------|------|-----|------|--------|-------------|
| 3 | 2.25 | 5.5 | 0.30 | 300 | 30 | D3401N | 1462036-1 |
| 4.5 | 3.38 | 8.3 | 0.45 | 300 | 68 | D3402N | 1462036-3 |
| 5 | 3.75 | 9.2 | 0.50 | 300 | 83 | D3403N | 1462036-5 |
| 6 | 4.50 | 11.0 | 0.60 | 300 | 120 | D3404N | 1462036-7 |
| 9 | 6.75 | 16.6 | 0.90 | 300 | 270 | D3405N | 1462036-9 |
| 12 | 9.00 | 22.1 | 1.20 | 300 | 480 | D3406N | 1-1462036-1 |
| 24 | 18.00 | 44.2 | 2.40 | 300 | 1920 | D3407N | 1-1462036-3 |
| 48 | 36.00 | 88.3 | 4.80 | 300 | 7680 | D3408N | 1-1462036-5 |

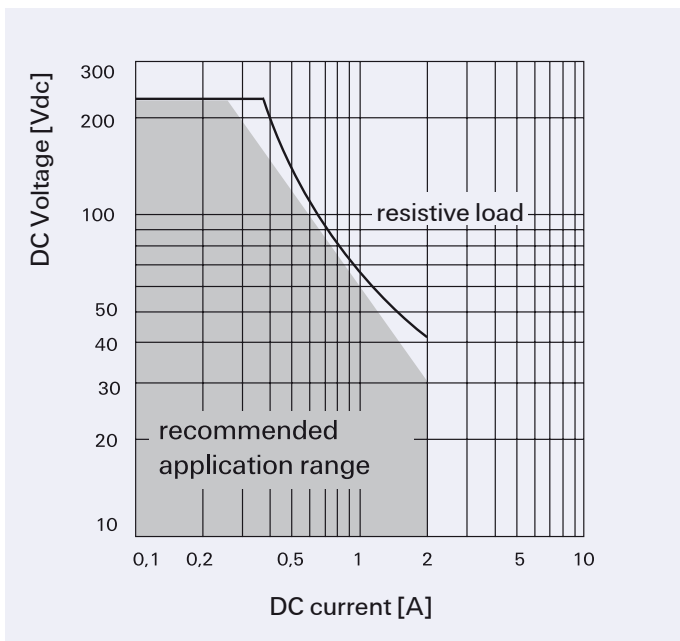
Further coil versions are available on request.

FT2/FU2 Relay

Contact Data

| | Standard Version / Sensitive Version / High Dielectric Version |
|---|---|
| Number of contacts and type | 2 changeover contacts |
| Contact assembly | Bifurcated contacts |
| Contact material | Palladium-ruthenium, gold covered |
| Limiting continuous current at max. ambient temperature | 2 A |
| Maximum switching current | 2 A |
| Maximum switching voltage | 220 Vdc 250 Vac |
| Maximum switching capacity | 60 W, 62.5 VA |
| Thermoelectric potential | < 10 μ V |
| Minimum switching voltage | 100 μ V |
| Initial contact resistance / measuring condition: 10 mA / 20 mV | < 50 m Ω |
| Electrical endurance at contact application 0 (\leq 30 mV / \leq 10 mA) at cable load open end Resistive load at 125 Vdc / 0.24 A - 30 W at 250 Vac / 0.25 A - 62.5 VA at 24 V / 1.25 A - 30 W | min. 2.5 x 10 ⁶ operations min. 2.0 x 10 ⁶ operations min. 1.0 x 10 ⁵ operations min. 1.0 x 10 ⁵ operations min. 1.0 x 10 ⁵ operations |
| Mechanical endurance | typ. 10 ⁸ operations |
| UL contact ratings | 220 Vdc / 0.24 A - 60 W 125 Vdc / 0.24 A - 30 W 250 Vac / 0.25 A - 62.5 VA 125 Vac / 0.5 A - 62.5 VA 30 Vdc / 2 A - 60 W |

Max. DC Load Breaking Capacity



FT2/FU2 Relay

Insulation

| | Standard Version | High Dielectric Version |
|--|--|--|
| Insulation resistance at 500 Vdc | > 10 ⁹ Ω | > 10 ⁹ Ω |
| Dielectric test voltage (1 min) between coil and contacts between adjacent contact sets between open contacts | 1500 Vrms 1500 Vrms 1000 Vrms | 4000 Vrms 1800 Vrms 1500 Vrms |
| Surge voltage resistance according IEC (10 / 700 μs) between coil and contacts between adjacent contact sets between open contacts according to FCC 68 (10 / 160 μs) between coil and contacts between adjacent contact sets between open contacts | 2500 V 1500 V 1500 V 2500 V 1500 V 1500 V | 6000 V 2500 V 2500 V 6000 V 2500 V 2500 V |

High Frequency Data

| | |
|--|---|
| Capacitance between coil and contacts between adjacent contact sets between open contacts | max. 4 pF max. 1 pF max. 1 pF |
| RF Characteristics Isolation at 100 MHz / 900 MHz Insertion loss at 100 MHz / 900 MHz V.S.W.R. at 100 MHz / 900 MHz | - 30.6 dB / - 13.7 dB - 0.02 dB / - 0.50 dB 1.02 / 1.27 |

General Data

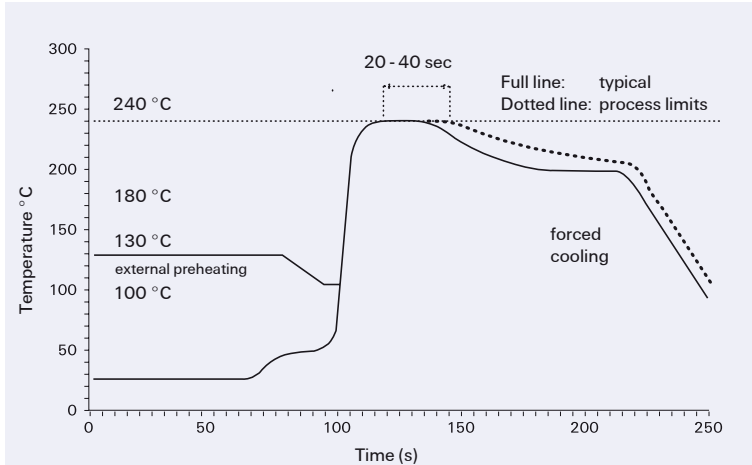
| | |
|--|--|
| Operate time at U _{nom} typ. / max. | 3 ms / 5 ms |
| Release time without diode in parallel (non-latching), typ. / max. | 2 ms / 5 ms |
| Release time with diode in parallel (non-latching), typ. / max. | 4 ms / 5 ms |
| Bounce time at closing contact, typ. / max. | 1 ms / 5 ms |
| Maximum switching rate without load | 50 operations/s |
| Ambient temperature | -55 °C ... +85 °C |
| Thermal resistance | < 125 K/W |
| Maximum permissible coil temperature | 150 °C |
| Vibration resistance (function) | 10 G 10 to 500 Hz |
| Shock resistance, half sinus, 11 ms | 15 G (function) 500 G (damage) |
| Degree of protection / Environmental protection | immersion cleanable, IP 67 / RT III / RT V |
| Needle flame test | application time 20 s, no burning or glowing |
| Mounting position | any |
| Processing information | Ultrasonic cleaning is not recommended |
| Weight (mass) | max. 3 g |
| Terminal surface | SnCu 0.7 |
| Moisture sensitive level (JDEC J-STD-020B) - SMD types | MSL 3 |
| Resistance to soldering heat | 265 °C / 10 s |

All data refers to 23 °C unless otherwise specified.

FT2/FU2 Relay

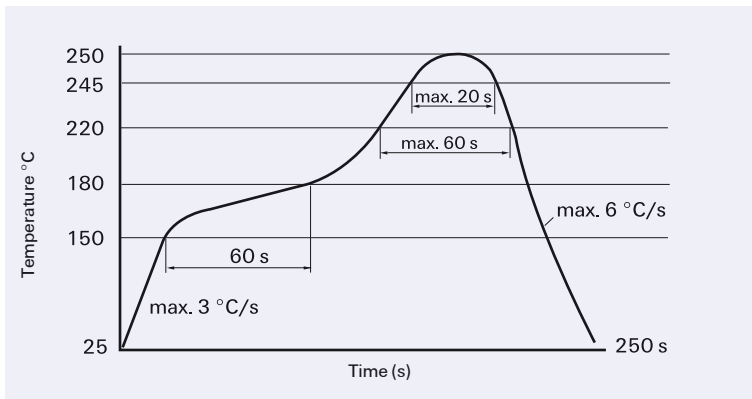
Recommended Soldering Conditions

Soldering conditions according IEC 60058-2-58 and IPC/JEDEC J-STD-020B



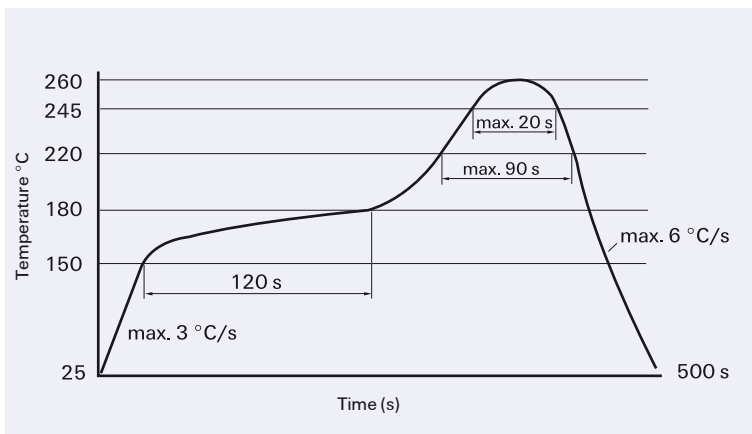
Vapor Phase Soldering: Temperature/Time Profile (Lead and Housing Peak Temperature)

Recommended reflow soldering profile



Infrared Soldering: Temperature/Time Profile (Lead and Housing Peak Temperature)

Resistance to soldering heat - Reflow profile

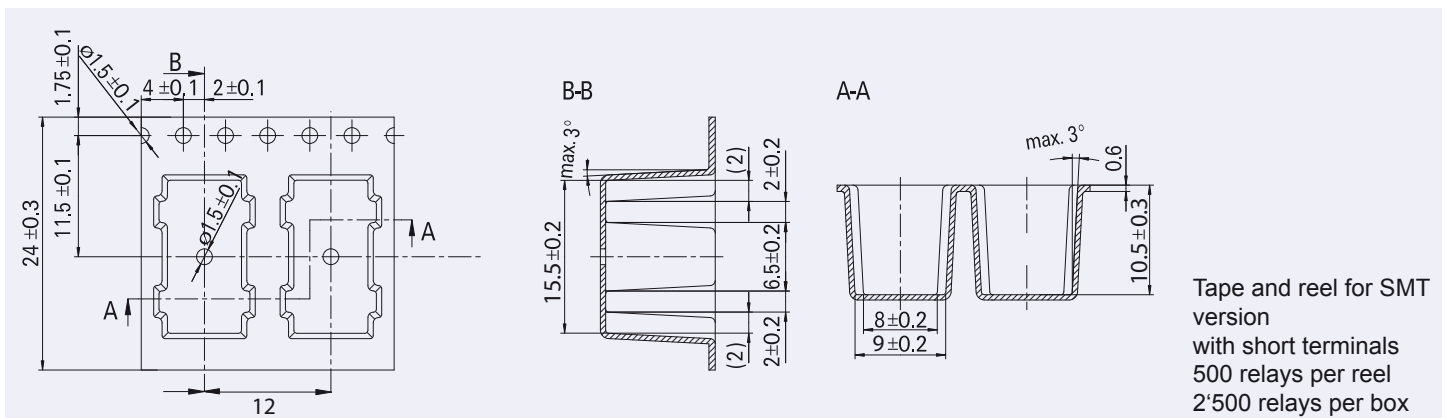
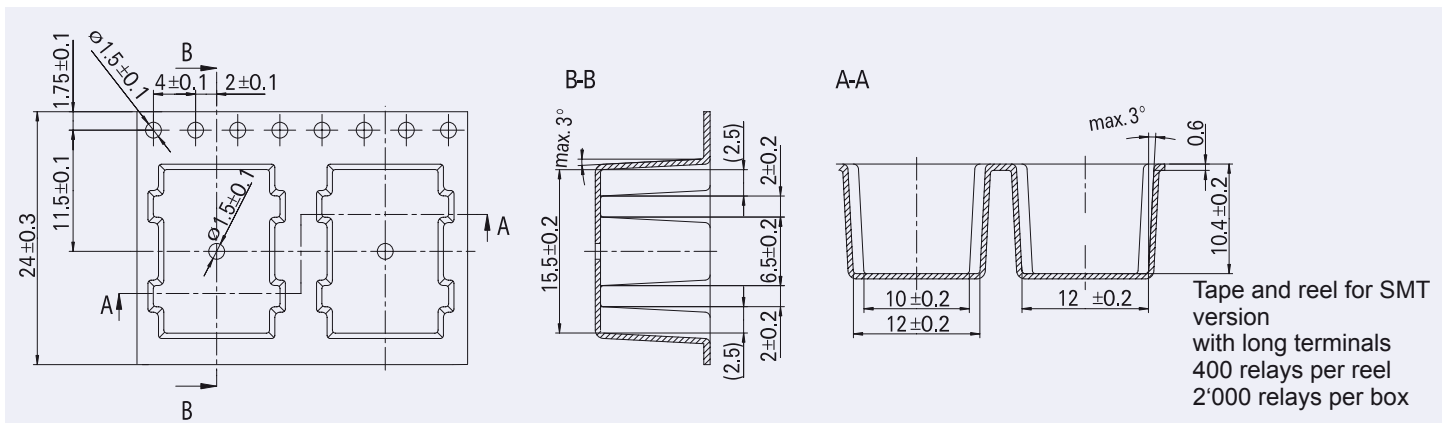
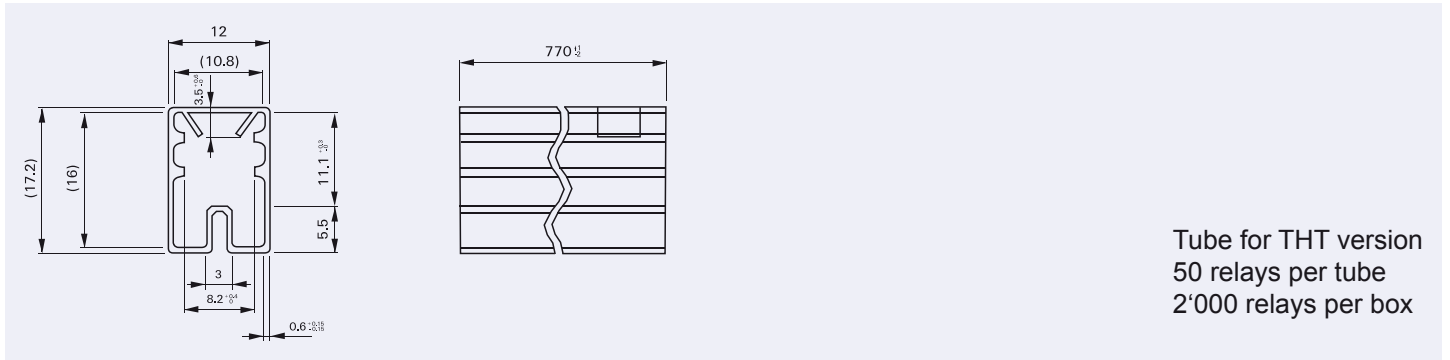


Infrared Soldering: Temperature/Time Profile (Lead and Housing Peak Temperature)

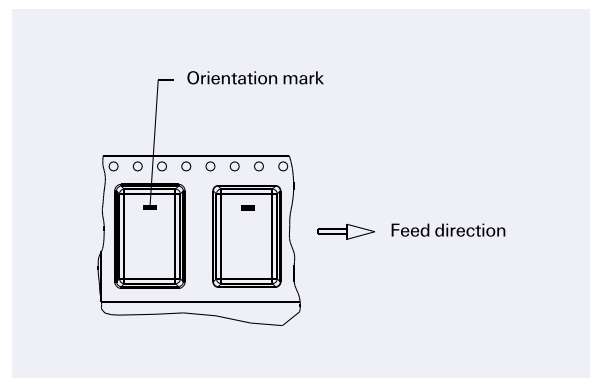
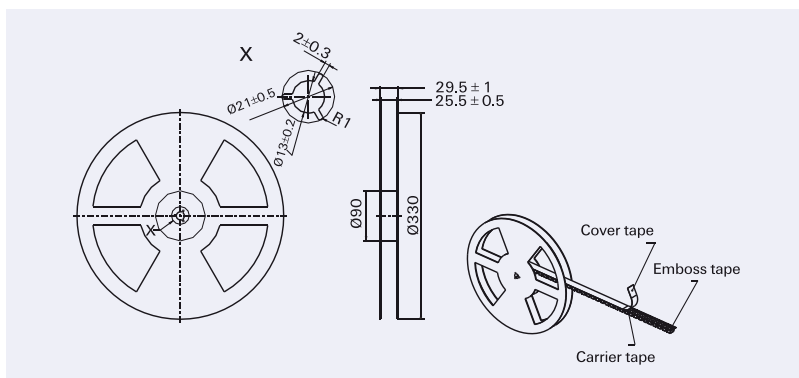
FT2/FU2 Relay

Packing

Dimensions in mm



Reel dimension



FT2/FU2 Relay

IM Relays

4th generation slim line – low profile polarized 2 c/o telecom signal relay with bifurcated contacts, available as non latching or latching relay with 1 coil. Nominal voltage range from 1.5 ... 24 V, coil power consumption of 50 ... 200 mW, latching relays with 1 coil 100 mW. The IM relay is available as through hole and surface mount type (J-Legs and Gull Wings) and capable to switch loads up to 60 W/62,5 VA. It is currently the only 2 A rated 4G relay on the market. Dielectric strength fulfills the Telcordia requirements according GR 1089 (2,5 kV – 2 / 10 μ s) and FCC part 68 (1,5 kV – 10 / 160 μ s). The IM relay is tested according CECC/IECQ and certified in accordance with IEC/EN 60950 and UL 60950.

Dimensions approx. 10 x 6 mm board space and 5.65 mm height.

P2 Relays

3rd generation polarized 2 c/o telecom relay with bifurcated contacts, available as non latching or latching relay with 1 or 2 coils. Nominal voltage range from 3 ... 24 V, coil power consumption 140 mW, latching relays with 1 coil 70 mW. The P2 Relay is available as through hole or surface mount type and capable to switch currents up to 5 A. Dielectric strength fulfills the Telcordia requirements according GR 1089 (2,5 kV – 2 / 10 μ s) and FCC part 68 (1,5 kV – 10 / 160 μ s). The P2 relay is tested according CECC/IECQ and certified in accordance with IEC/EN 60950 and UL 60950. Dimensions approx. 15 x 7,5 mm board space and 10 mm height.

FX2 Relays

3rd generation polarized 2 c/o telecom relay with bifurcated contacts, available as non latching or latching relay with 1 coil. Nominal voltage range from 3 ... 48 V, coil power consumption of 80 ... 260 mW for the high sensitive version, 140... 300 mW for the standard version, latching relays with 1 coil 100 mW. The FX2 relay is available as through hole type and capable to switch loads up to 60 W/62,5 VA. Dielectric strength fulfills the Telcordia requirements according GR 1089 (2,5 kV – 2 / 10 μ s) and FCC part 68 (1,5 kV – 10 / 160 μ s). The FX2 relay is tested according CECC/IECQ and certified in accordance with IEC/EN 60950 and UL 60950. Dimensions approx. 15 x 7,5 mm board space and 10,7 mm height.

FT2 / FU2 Relays

3rd generation non polarized, non latching 2 c/o telecom relay with bifurcated contacts. Nominal voltage range from 3 ... 48 V, coil power consumption 200 ... 300 mW. Most sensitive 48 V relay. Available as through hole and surface mount type. Dielectric strength fulfills the Telcordia requirements according GR 1089 (2,5 kV – 2 / 10 μ s) and FCC part 68 (1,5 kV – 10 / 160 μ s). The FT2/FU2 relay is tested according CECC/IECQ and certified in accordance with IEC/EN 60950 and UL 60950. Dimensions approx. 15 x 7,5 mm board space and 10 mm height.

FP2 Relays

3rd generation polarized 2 c/o telecom relay with bifurcated contacts, available as non latching or latching relay with 1 or 2 coils. Nominal voltage range from 3 ... 48 V, coil power consumption of 80 ... 260 mW for the high sensitive version, 140... 300 mW for the standard version, latching relays with 1 coil 100 mW. The FP2 Relay is available as through hole type and capable to switch loads up to 60 W/62,5 VA. Dielectric strength fulfills FCC part 68 (1,5 kV – 10 / 160 μ s). The FP2 is tested according CECC/IECQ approved.

Dimensions approx. 14 x 9 mm board space and 5 mm height.

MT2

2nd generation non polarized, non latching 2 c/o telecom and signal relay with bifurcated contacts. Nominal voltage range from 3 ... 48 V, coil power consumption 150/200/300/400 and 550 mW. Dielectric strength fulfills the requirements according FCC part 68 (1,5 kV – 10 / 160 μ s).

Dimensions approx. 20 x 10 mm board space and 11 mm height.

D2n Relays

2nd generation non polarized 2 c/o relay for telecom and various other applications. Nominal voltage range from 3 ... 48 V, coil power consumption from 150 ... 500 mW. The D2n relay is capable to switch currents up to 3 A. Dielectric strength fulfills the requirements according FCC part 68 (1,5 kV – 10 / 160 μ s). Dimensions approx. 20 x10 mm board space and 11 mm height.

P1 Relays

Extremely sensitive, polarized 1 c/o relay with bifurcated contacts for a wide range of applications, available as non latching or latching relay with 1 or 2 coils. Nominal voltage range from 3 ... 24 V, coil power consumption 65 mW, latching relays with 1 coil 30 mW. The P1 relay is available as through hole or surface mount type and capable to switch currents up to 1 A. Dielectric strength fulfills the requirements according FCC part 68 (1,5 kV – 10 / 160 μ s). Dimensions approx. 13 x 7,6 mm board space and 7 mm height for THT or 8 mm height for SMT version.

W11 Relays

Low cost, non polarized 1 c/o relay for various applications. Nominal voltage range from 3 ... 24 V, coil power consumption 450 mW, sensitive versions 200 mW. The W11 relay is capable to switch currents up to 3 A. Dielectric strength 1000 Vrms.

Dimensions approx. 15,6 x 10,6 mm board space and 11,5 mm height.

Reed Relays

High sensitive, non polarized relay for telecom and various other applications, available with 1 n/o, 2 n/o or 1c/o contacts. Nominal voltage range from 5 ... 24 V, coil power consumption 50...280 mW for 1 n/o and 125 ... 280 mW for 2 n/o or 1 c/o versions. Reedrelays are available in DIP or SIL housing and capable to switch currents up to 0,5 A. Integrated diode and/or electrostatic shield optional. Dielectric strength 1500 Vdc. Dimensions approx. 19,3 x 7 mm board space and 5 ... 7,5 mm height for DIP or 19,8 x 5 mm board space and 7,8 mm height for SIL version.

Cradle Relays

Extremely reliable and mature relay family of 1st generation for various signal switching applications. Available as non polarized, polarized / latching and relay with AC coil. The benefit is the possibility of combining various contact sets from 1 up to 6 poles, single and bifurcated contacts, different contact materials with a coil voltage range from 1,5 Vdc to 220 Vac. Cradle relays are available as dust protected and hermetically sealed versions, with plug in or solder terminals and are capable to switch currents up to 5A. Forcibly guided (linked) contact sets optional. Dielectric strength 500 Vrms. Dimensions from approx. 19 x 24 to 19x35 mm board space and 30 mm height.

Other Relays

We offer a variety of different relay families for maintenance and replacement purposes. These relays are up to 60 years old now, such as Card Relay SN (V23030 series), Small General Purpose Relay (V23006 series), Small Polarized Relay (V23063 ... V23067 and V23163 ... V23167 series). Accessories like sockets, hold down springs, etc. optional.

High Frequency Relays

HF3 / HF3S / HF6 series RF relays offering excellent RF characteristics in a small package. All HF series relays are suitable for SMD soldering processes. Available as non latching or latching versions with 1 or 2 coils and a nominal coil voltage range from 3 ... 24 V, a coil power consumption of 140 mW or 70 mW (single coil latching types).

HF3: Low cost RF relay suitable up to 3 GHz. Impedance 50 and 75 Ohm. 50 W hot switching and 50 W RF power carry capability. Dimensions 14.6 x 7.3 x 10.3 mm.

HF3S: High performance, high power RF relay suitable up to 3 GHz, 50 W hot switching and 150 W RF power carry capability. Dimensions 15 x 7.6 x 10.6 mm.

HF6: High performance, high power RF relay suitable up to 6 GHz, 50 W hot switching and 50 W RF power carry capability. Dimensions 15 x 7.6 x 10.6 mm.



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