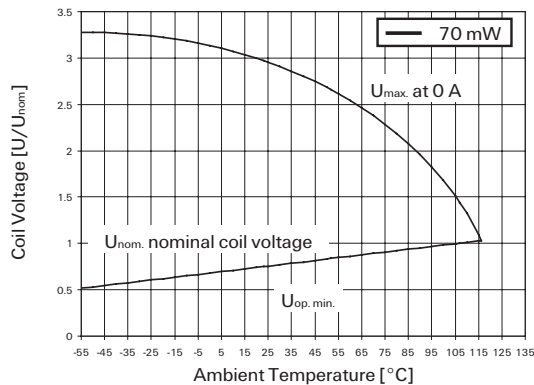
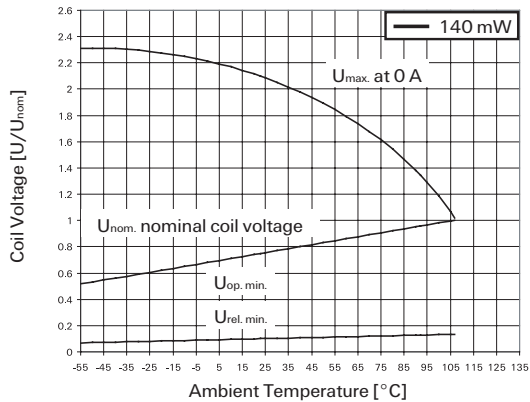


## HF3 Relay (Continued)

### Coil operating Range



### RF Data

|                                    |                |                |
|------------------------------------|----------------|----------------|
| Isolation                          |                |                |
| at 100MHz/900MHz                   | 80dB/72dB      | 80dB/72dB      |
| at 3GHz                            | 45dB           | 40dB           |
| Insertion loss                     |                |                |
| at 100MHz/900MHz                   | 0.03dB/0.12dB  | 0.03dB/0.12dB  |
| at 3GHz                            | 0.35dB         | 0.40dB         |
| Voltage standing wave ratio (VSWR) |                |                |
| at 100MHz/900MHz/3GHz              | 1.05/1.20/1.20 | 1.05/1.20/1.40 |

### Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

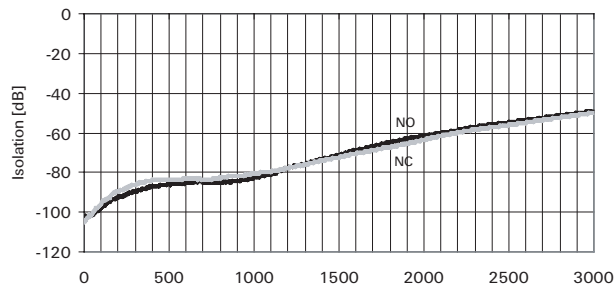
|                                                  |                                     |
|--------------------------------------------------|-------------------------------------|
| Ambient temperature                              | -55°C to +85°C                      |
| Thermal resistance                               | <165K/W                             |
| Category of environmental protection             |                                     |
| IEC 61810                                        | RT III - wash tight                 |
| Degree of protection, IEC 60529                  | IP 67, immersion cleanable          |
| Vibration resistance (functional)                | 35g, 10 to 1000Hz                   |
| Shock resistance (functional), half sinus 11ms   | 50g                                 |
| Shock resistance (destructive), half sinus 0.5ms | 150g                                |
| Terminal type                                    | SMT                                 |
| Weight                                           | max. 2.5g                           |
| Resistance to soldering heat SMT                 | Peak Value                          |
| IEC 60068-2-58                                   | 265°C                               |
| Moisture sensitive level, JEDEC J-Std-020D       | MSL3                                |
| Ultrasonic cleaning                              | not recommended                     |
| Packaging/unit                                   | reel/400 pcs., box/400 or 2000 pcs. |

### Insulation Data

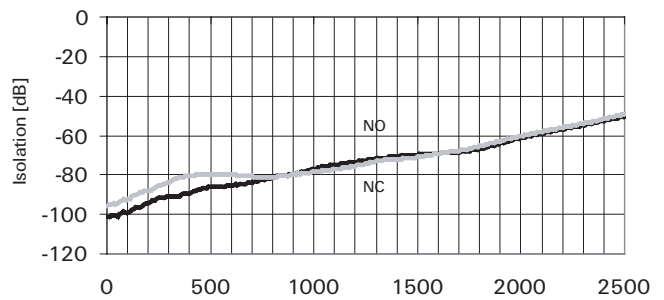
|                                 | 50Ω version          | 75Ω version |
|---------------------------------|----------------------|-------------|
| Initial dielectric strength     |                      |             |
| between open contacts           | 600V <sub>rms</sub>  |             |
| between contact and coil        | 1000V <sub>rms</sub> |             |
| Initial surge withstand voltage |                      |             |
| between open contacts           | 1000V                |             |
| between contact and coil        | 1500V                |             |

## HF3 Relay (Continued)

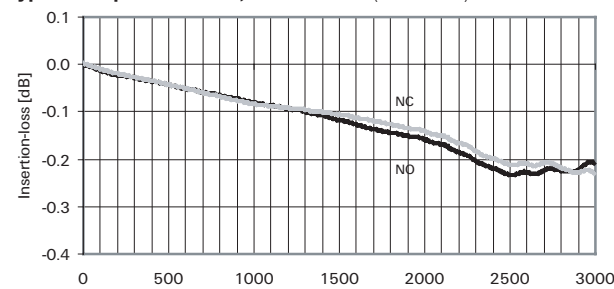
Typical RF performance, 50Ω version



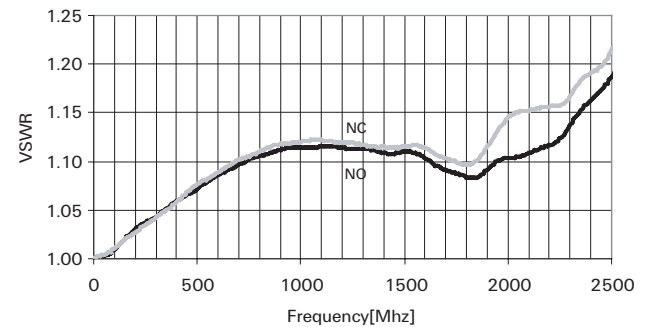
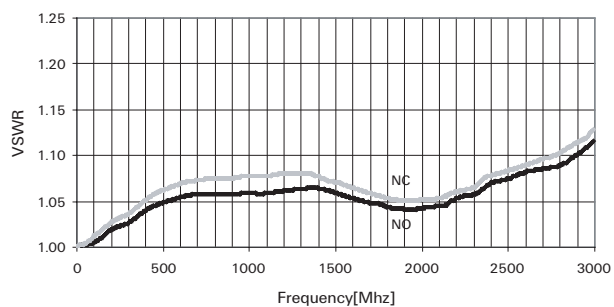
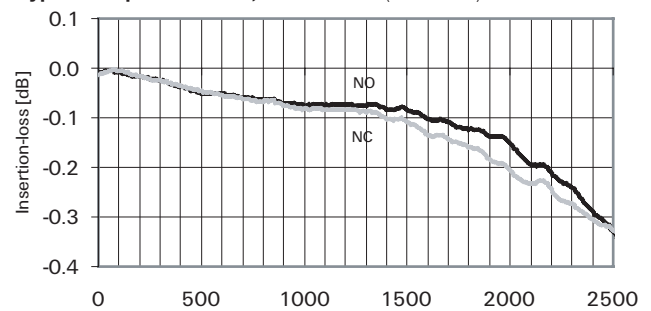
Typical RF performance, 75Ω version



Typical RF performance, 50Ω version (continued)



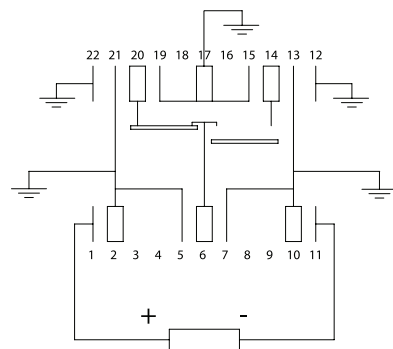
Typical RF performance, 75Ω version (continued)



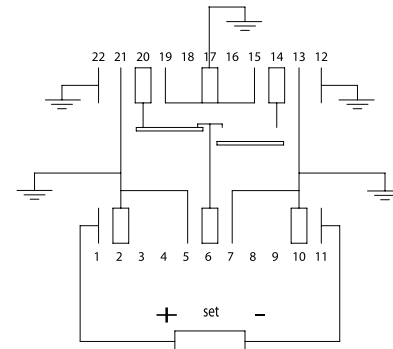
### Terminal assignment

TOP view on component side of PCB

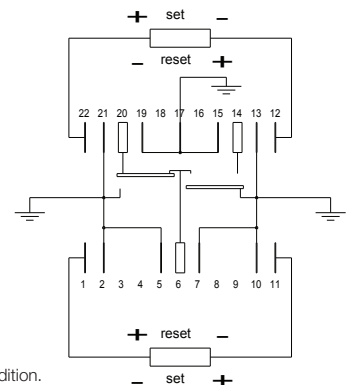
Monostable



Bistable, 1 coil



Bistable, 2 coils

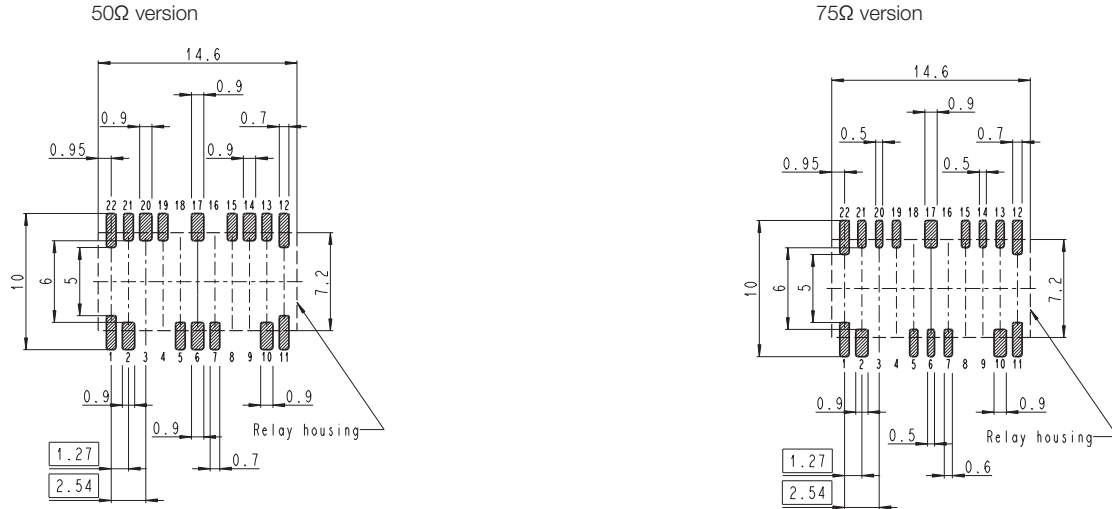


Contacts are shown in reset condition.  
Contact position might change during transportation and must be reset before use.

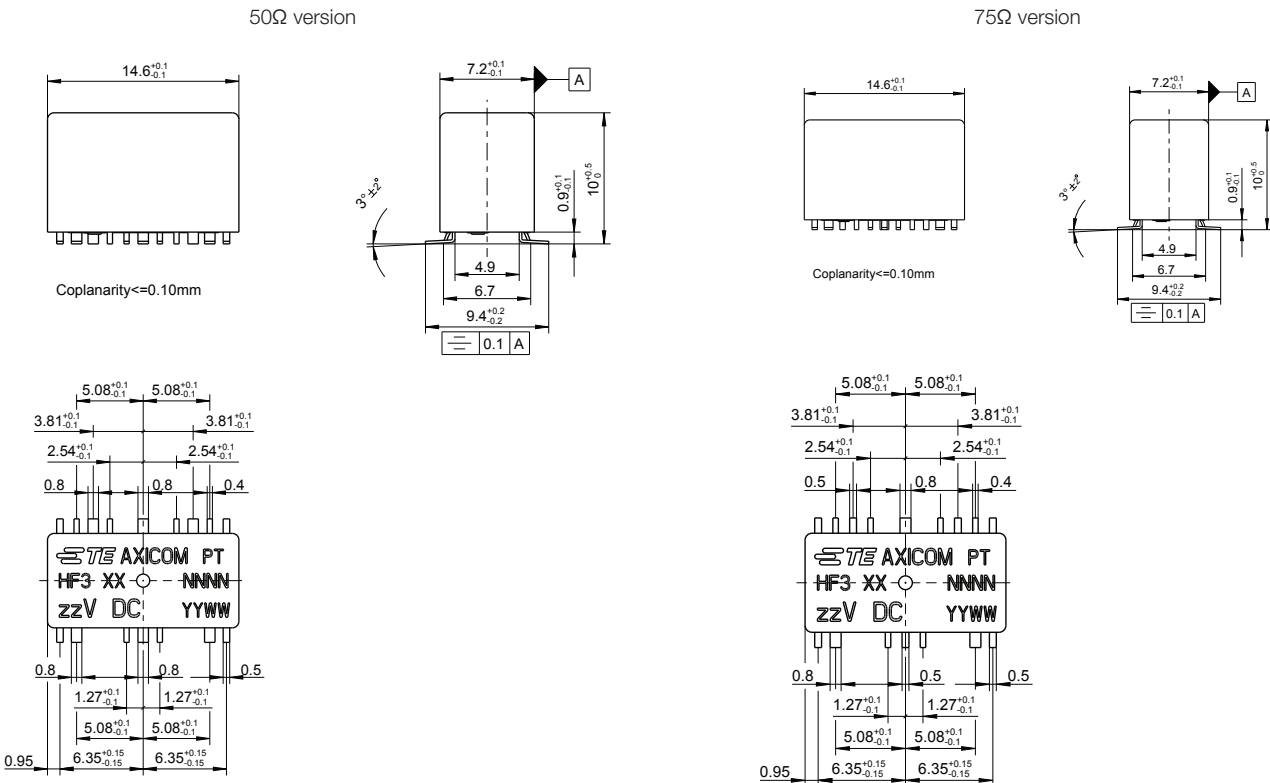
## HF3 Relay (Continued)

### PCB layout

TOP view on component side of PCB

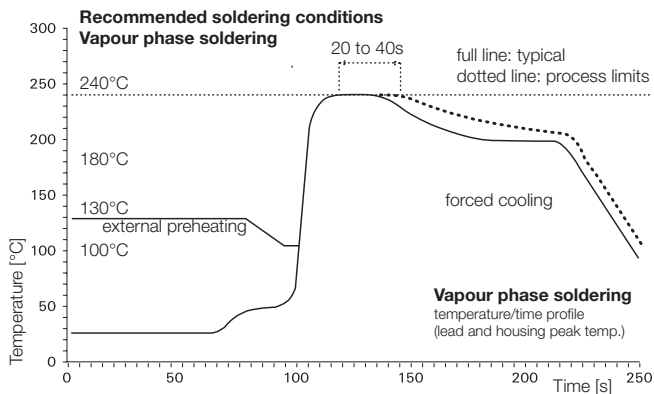
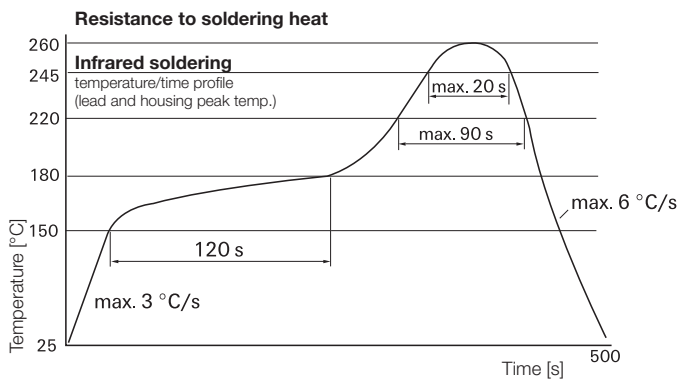
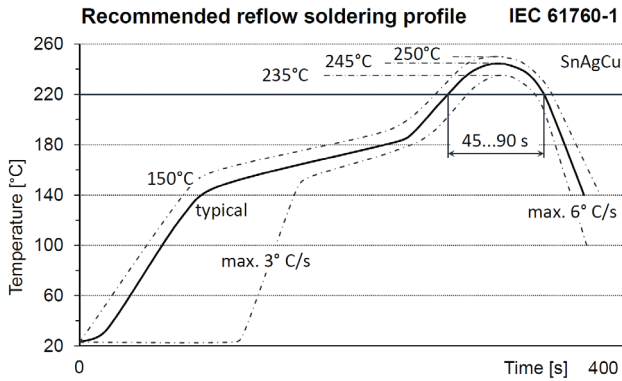


### Dimensions

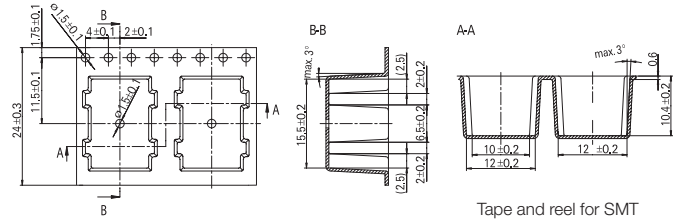


## HF3 Relay (Continued)

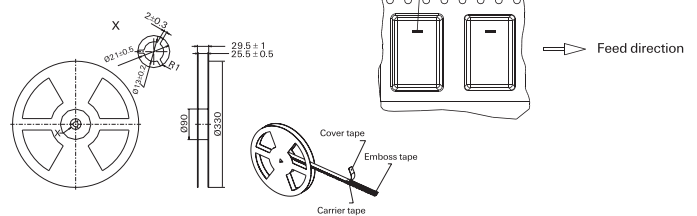
### Processing



### Packing



### Reel dimensions



## HF3 Relay (Continued)

### Product code structure

Typical product code **HF3** **53**

| Type      | Signal Relays HF3 Series<br>1 form C, 1 CO     |           |                               |  |  |
|-----------|------------------------------------------------|-----------|-------------------------------|--|--|
| Coil      | Coil code: please refer to coil versions table |           |                               |  |  |
|           | Performance type                               |           |                               |  |  |
| <b>5x</b> | 50Ω version, monostable 1coil                  | <b>0x</b> | 75Ω version, monostable 1coil |  |  |
| <b>7x</b> | 50Ω version, bistable 1coil                    | <b>2x</b> | 75Ω version, bistable 1coil   |  |  |
| <b>9x</b> | 50Ω version, bistable 2coils                   | <b>4x</b> | 75Ω version, bistable 2coils  |  |  |

| Product code | Arrangement     | Version | Coil   | Coil type        | Part number |
|--------------|-----------------|---------|--------|------------------|-------------|
| HF3 51       | 1 form C (1 CO) | 50ohm   | 3VDC   | Monostable       | 1462051-1   |
| HF3 52       |                 |         | 4.5VDC |                  | 1-1462051-6 |
| HF3 53       |                 |         | 5VDC   |                  | 1462051-2   |
| HF3 54       |                 |         | 6VDC   |                  | 1-1462051-7 |
| HF3 55       |                 |         | 9VDC   |                  | 1462051-3   |
| HF3 56       |                 |         | 12VDC  |                  | 1462051-4   |
| HF3 57       |                 |         | 24VDC  |                  | 1462051-5   |
| HF3 71       | 1 form C (1 CO) | 50ohm   | 3VDC   | Bistable 1 coil  | 1462051-6   |
| HF3 72       |                 |         | 4.5VDC |                  | 1-1462051-8 |
| HF3 73       |                 |         | 5VDC   |                  | 1462051-7   |
| HF3 76       |                 |         | 12VDC  |                  | 1462051-9   |
| HF3 91       | 1 form C (1 CO) | 50ohm   | 3VDC   | Bistable 2 coils | 1-1462051-1 |
| HF3 92       |                 |         | 4.5VDC |                  | 2-1462051-0 |
| HF3 93       |                 |         | 5VDC   |                  | 1-1462051-2 |
| HF3 95       |                 |         | 9VDC   |                  | 1-1462051-3 |
| HF3 96       |                 |         | 12VDC  |                  | 1-1462051-4 |
| HF3 97       |                 |         | 24VDC  |                  | 1-1462051-5 |
| HF3 01       | 1 form C (1 CO) | 75ohm   | 3VDC   | Monostable       | 1462050-1   |
| HF3 02       |                 |         | 4.5VDC |                  | 1-1462050-6 |
| HF3 03       |                 |         | 5VDC   |                  | 1462050-2   |
| HF3 06       |                 |         | 12VDC  |                  | 1462050-4   |
| HF3 07       |                 |         | 24VDC  |                  | 1462050-5   |
| HF3 21       | 1 form C (1 CO) | 75ohm   | 3VDC   | Bistable 1 coil  | 1462050-6   |
| HF3 23       |                 |         | 5VDC   |                  | 1462050-7   |
| HF3 26       |                 |         | 12VDC  |                  | 1462050-9   |
| HF3 41       | 1 form C (1 CO) | 75ohm   | 3VDC   | Bistable 2 coils | 1-1462050-1 |
| HF3 43       |                 |         | 5VDC   |                  | 1-1462050-2 |
| HF3 46       |                 |         | 12VDC  |                  | 1-1462050-4 |
| HF3 47       |                 |         | 24VDC  |                  | 1-1462050-5 |

This list represents the most common types and does not show all variants covered by this data sheet.

Other types on request