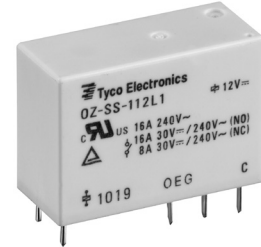


**Power PCB Relay OZ/OZT**

- 1 pole, 16A, 1 form A(NO) or 1 form C (CO)
- UL TV-8 (OZT) available
- Meet 5000V dielectric voltage between coil and contacts
- Meet 10000V surge voltage between coil and contacts



Typical applications  
Home appliances, office machines



**Approvals**

UL E58304, CSA LR48471, TuV R50139112, CQC 03001007810  
Technical data of approved types on request

**Contact Data**

|   |                               |
|---|-------------------------------|
| Contact arrangement                       | 1 form A (NO), 1 form C (CO)  |
| Rated voltage                             | 240VAC                        |
| Max. switching voltage                    | 24VDC, 240VAC                 |
| Rated current                             | 16A                           |
| Switching power                           | 3840VA, 380W                  |
| Contact material                          | AgSnO                         |
| Min. recommended contact load             | 100mA, 5VDC                   |
| Initial contact resistance                | 100mΩ at 1A, 6VDC             |
| Frequency of operation, with/without load | 1800/18000h <sup>-1</sup>     |
| Operate/release time max.                 |                               |
| standard version:                         | 15/8ms                        |
| sensitive version:                        | 20/8ms                        |
| Electrical endurance                      |                               |
| NO 16A, 240VAC, resistive,                | 100x10 <sup>3</sup> ops.      |
| NC 8A, 240VAC, resistive,                 | 100x10 <sup>3</sup> ops.      |
| Contact ratings                           | 16A, 240VAC/30VDC             |
| Mechanical endurance                      | 10x10 <sup>6</sup> operations |

**Coil Data**

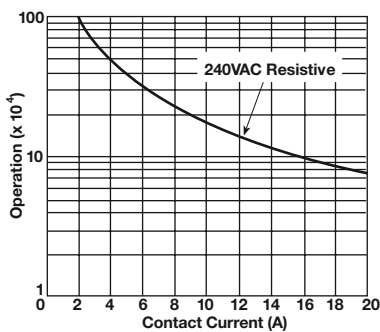
|                                     |                              |
|-------------------------------------|------------------------------|
| Coil voltage range                  | 5 to 48VDC                   |
| Coil insulation system according UL | class105 (A)<br>class155 (F) |

**Coil versions, DC coil**

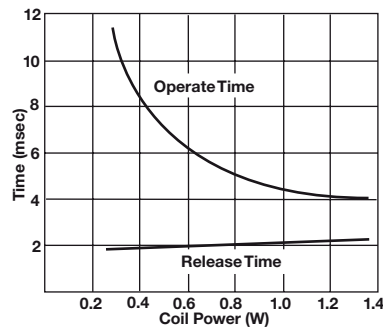
| Coil code                    | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power mW |
|------------------------------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| <b>Standard coil, 720mW</b>  |                   |                     |                     |                       |                     |
| 05                           | 5                 | 3.5                 | 0.25                | 36                    | 720                 |
| 06                           | 6                 | 4.2                 | 0.3                 | 48.5                  | 720                 |
| 09                           | 9                 | 6.3                 | 0.45                | 115                   | 720                 |
| 12                           | 12                | 8.4                 | 0.6                 | 200                   | 720                 |
| 24                           | 24                | 16.8                | 1.2                 | 820                   | 720                 |
| 48                           | 48                | 33.6                | 2.4                 | 3300                  | 720                 |
| <b>Sensitive coil, 540mW</b> |                   |                     |                     |                       |                     |
| 05                           | 5                 | 3.8                 | 0.25                | 48.5                  | 540                 |
| 06                           | 6                 | 4.5                 | 0.3                 | 68                    | 540                 |
| 09                           | 9                 | 6.8                 | 0.45                | 155                   | 540                 |
| 12                           | 12                | 9.0                 | 0.6                 | 270                   | 540                 |
| 24                           | 24                | 18.0                | 1.2                 | 1100                  | 540                 |
| 48                           | 48                | 36.0                | 2.4                 | 4400                  | 540                 |

All figures are given for coil without pre-energization, at ambient temperature +23°C.

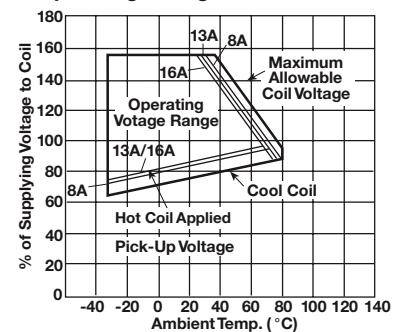
**Electrical endurance**



**Operate time**



**Coil operative range**



**Power PCB Relay OZ/OZT** (Continued)

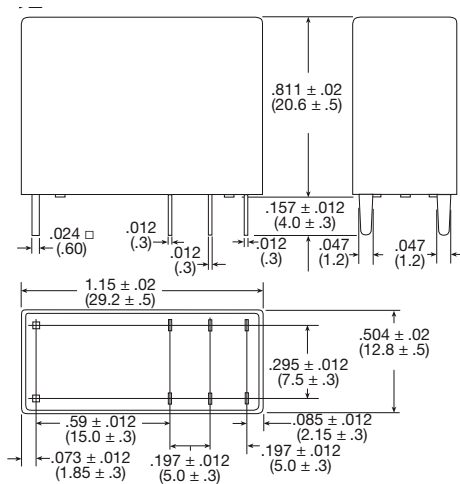
**Insulation Data**

|                                 |          |
|---------------------------------|----------|
| Initial dielectric strength     |          |
| between open contacts           | 1000Vrms |
| between contact and coil        | 5000Vrms |
| Initial surge withstand voltage |          |
| between contact and coil        | 10000V   |
| Initial insulation resistance   | 1000MΩ   |
| Clearance/creepage              |          |
| between contact and coil        | 5.5/8mm  |

**Other Data**

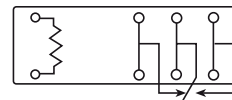
|   |                                       |
|---|---------------------------------------|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="http://www.te.com/customer-support/rohssupportcenter">www.te.com/customer-support/rohssupportcenter</a> |                                       |
| Ambient temperature   |                                       |
| standard coil:  | -30 to 60°C                           |
| sensitive coil:   | -30 to 70°C                           |
| Category of environmental protection  |                                       |
| IEC 61810   | RTII - flux proof, RTIII - wash tight |
| Vibration resistance (functional)   | 10 to 50Hz, 1.5mm double amplitude    |
| Shock resistance (functional)   |                                       |
| IEC 60068-2-27 (half sine)  | 98m/s <sup>2</sup> , 11ms             |
| Terminal type   | PCB-THT                               |
| Weight  | 13g                                   |
| Resistance to soldering heat THT  |                                       |
| IEC 60068-2-20  | 260°C/5s                              |
| Packaging/unit  | box/1000 pcs.                         |

**Dimensions**



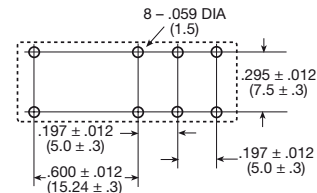
**Terminal assignment**

Bottom view on solder pins



**PCB layout**

Bottom view on solder pins



**Power PCB Relay OZ/OZT** (Continued)

|                               |  |                          |                        |           |          |          |          |          |             |  |
|-------------------------------|--|--------------------------|------------------------|-----------|----------|----------|----------|----------|-------------|--|
| <b>Product code structure</b> | Typical product code                           |                          |                        |           |          |          |          |          |             |  |
|                               | <b>OZ</b>                                      | <b>-SS</b>               | <b>1</b>               | <b>12</b> | <b>D</b> | <b>M</b> | <b>1</b> | <b>F</b> | <b>,200</b> |  |
| <b>Type</b>                   | <b>OZ / OZT</b> Power PCB Relay OZ / OZT       |                          |                        |           |          |          |          |          |             |  |
| <b>Sealing</b>                | <b>SS</b> Flux proof                           | <b>SH</b> Wash tight     |                        |           |          |          |          |          |             |  |
| <b>Pole</b>                   | <b>1</b> 1 pole                                |                          |                        |           |          |          |          |          |             |  |
| <b>Coil</b>                   | Coil code: please refer to coil versions table |                          |                        |           |          |          |          |          |             |  |
| <b>Coil power</b>             | <b>D</b> Standard 720mW                        | <b>L</b> Sensitive 540mW |                        |           |          |          |          |          |             |  |
| <b>Contact arrangement</b>    | <b>Blank</b> 1 form C (CO)                     |                          | <b>M</b> 1 form A (NO) |           |          |          |          |          |             |  |
| <b>Contact material</b>       | <b>Blank</b> AgCdO                             |                          | <b>1</b> AgSnO         |           |          |          |          |          |             |  |
| <b>Coil insulation</b>        | <b>Blank</b> Class 105 (A)                     |                          | <b>F</b> Class 155 (F) |           |          |          |          |          |             |  |
| <b>Suffix</b>                 | <b>,200</b> Flux proof                         |                          | <b>,294</b> Wash tight |           |          |          |          |          |             |  |

| Product code     | Version | Contact       | Cont.material | Coil power | Coil voltage | Sealing    | Part number |
|------------------|---------|---------------|---------------|------------|--------------|------------|-------------|
| OZ-SS-105DM1,200 | 16A     | 1 form A (NO) | AgSnO         | 720mW      | 5VDC         | Flux proof | 1461251-5   |
| OZ-SS-112DM1,200 |         |               |               |            | 12VDC        |            | 2-1440002-2 |
| OZ-SS-124DM1,200 |         |               |               |            | 24VDC        |            | 2-1440002-6 |
| OZ-SS-105LM1,200 |         |               |               | 540mW      | 5VDC         |            | 1461251-3   |
| OZ-SS-112LM1,200 |         |               |               |            | 12VDC        |            | 2-1440002-4 |
| OZ-SS-124LM1,200 |         |               |               |            | 24VDC        |            | 2-1440002-9 |
| OZ-SH-105DM1,294 |         |               |               | 720mW      | 5VDC         | Wash tight | 1461250-4   |
| OZ-SH-112DM1,294 |         |               |               |            | 12VDC        |            | 1-1461250-4 |
| OZ-SH-124DM1,294 |         |               |               |            | 24VDC        |            | 1-1440002-0 |
| OZ-SH-105LM1,294 |         |               |               | 540mW      | 5VDC         |            | 1440002-5   |
| OZ-SH-112LM1,294 |         |               |               |            | 12VDC        |            | 1440002-8   |
| OZ-SH-124LM1,294 |         |               |               |            | 24VDC        |            | 1-1461250-5 |
| OZ-SS-105D1,200  |         | 1 form C (CO) |               | 720mW      | 5VDC         | Flux proof | 1-1649399-7 |
| OZ-SS-112D1,200  |         |               |               |            | 12VDC        |            | 2-1649399-0 |
| OZ-SS-124D1,200  |         |               |               |            | 24VDC        |            | 2-1649399-2 |
| OZ-SS-105L1,200  |         |               |               | 540mW      | 5VDC         |            | 1649399-1   |
| OZ-SS-112L1,200  |         |               |               |            | 12VDC        |            | 1649399-4   |
| OZ-SS-124L1,200  |         |               |               |            | 24VDC        |            | 1649399-6   |
| OZ-SS-112LF,000  |         |               |               |            | 12VDC        |            | 1461869-3   |
| OZ-SH-112LF,000  |         |               |               |            | 12VDC        | Wash tight | 1461869-4   |