# ■ Characteristics

| | |
|---|---|
| **Contact resistance (see note 2)** | 50 mΩ max. |
| **Operate time (see note 3)** | 15 ms max. |
| **Release time (see note 3)** | 15 ms max. |
| **Max. operating frequency** | Mechanical: 18,000 operations/hour<br>Electrical: 1,800 operations/hour (under rated load) |
| **Insulation resistance (see note 4)** | 100 MΩ (at 500 VDC) |
| **Dielectric strength** | Between coil and contacts: 2,000 VAC, 50/60 Hz for 1 minute<br>Between contacts of same polarity: 1,000 VAC, 50/60 Hz for 1 minute |
| **Vibration resistance** | Malfunction: 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude) |
| **Shock resistance** | Malfunction: 200 $m/s^2$ |
| **Mechanical endurance** | 50,000,000 operations |
| **Electrical endurance (see note 5)** | Input:10,000,000 operations (10 mA) or 50,000 operations (1 A) with resistive load<br>2,500,000 operations (10 mA) or 20,000 operations (1 A) with inductive load<br>Output:1,000,000 operations with rated load |
| **Error rate (level P) (Reference value) (see note 6)** | Input: 100 μA at 1 VDC<br>Output: 10 mA at 5 VDC |
| **Ambient temperature** | Operating:–40°C to 70°C (with no icing or condensation) |
| **Ambient humidity** | Operating: 5% to 85% (with no icing or condensation) |
| **Weight** | Approx. 17 g |

**Note: 1.** The above values are all initial values.

**2.** The contact resistance was measured with 1 A at 5 VDC using the voltage drop method.

**3.** The operate and the release times were measured with the rated voltage imposed with any contact bounce ignored at an ambient temperature of 23°C.

**4.** The insulation resistance was measured with a 500-VDC megger applied to the same places as those used for checking the dielectric strength.

**5.** The electrical endurance was measured at an ambient temperature of 23°C.

**6.** This value was measured at a switching frequency of 120 operations per minute.

# ■ Socket Ratings

## Features

- Easily mounts or dismounts the G7T I/O Relay.
- Also mounts the Indicator Module (with surge suppressing function).
- Only 19 mm in width.
- Terminals corresponding to the NO and NC contacts of a Relay are arranged on top of the Socket to enhance maintainability.
- Also permits mounting of the G3TA Solid-state I/O Relay.

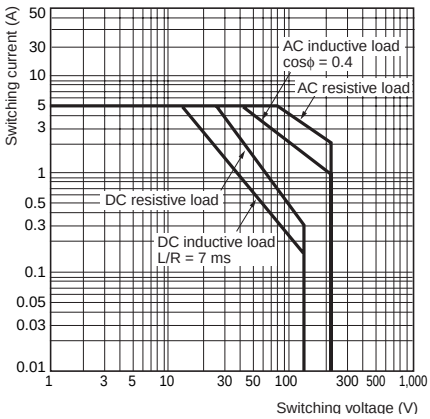
## Specifications

| | |
|---|---|
| **Model** | P7TF-05 |
| **Contact resistance ✻** | 10 mΩ max. |
| **Dielectric strength** | 2,000 VAC for 1 minute |
| **Insulation resistance** | 1,000 MΩ min. (at 500 VDC) |
| **Vibration resistance** | 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude) |
| **Shock resistance** | 1,000 $m/s^2$ |
| **Ambient temperature** | Operating:–40°C to 70°C (with no icing or condensation) |
| **Ambient Humidity** | Operating: 5% to 85%RH |
| **Weight** | Approx. 28 g |

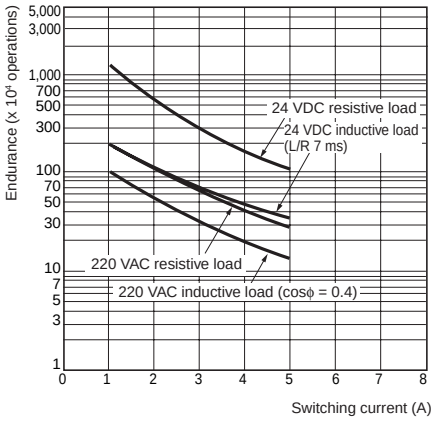
✻ Measurement condition: 1 A at 5 VDC.

# Engineering Data

## Maximum Switching Power (Output Model with Life of 1,000,000 Operations)




## Electrical Endurance Output Relay




## Input Relay