



Taiko Device Techno & Co., Ltd. TA1 RELAY SPECIFICATION

All data are at 20°C ambient temperature unless otherwise noted.

Silent PCB miniature power relay. (60dB max.)

Covers a broad range of the automotive applications.

The relays are lead free / RoHS compliant.



TA1

Available Standard Types

see nomenclature page for details

TA1	Standard Type	wave solderable	85°C	max. ambient temperature
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Special Features available: (see nomenclature page)

Available Coil Options

Coil Resistance	Coil Inductance	Nominal Power	Operate Voltage	Operate Power	Release Voltage
225 Ω	310 mH	0.640 W	7.7 V	0.264 W	0.8 V
160 Ω	227 mH	0.900 W	6.5 V	0.264 W	0.8 V

±10%

ITEM	SPECIFICATION
Contact Arrangement	1 Form C
Contact Material	AgSnO ₂ Alloy
Contact Resistance	Typical 6 mΩ (Max. 50mΩ at 6 VDC 1A)
Contact Rated Load	25A at 14VDC Motor load (Locked Rotor)
Max. Switching Current/ Voltage	30A at 16VDC
Max. Continuous Current at 20 °C	25A for 3 minutes
Min. Switching Current (recommended)	1A at 12VDC
Dielectric Strength	500VAC for 1 minute (between coil and contact)
	500VAC for 1 minute (between open contacts)
Insulation Resistance	Min 100MΩ (at 500VDC)
Operate Time	Typical 3.5 ms (12VDC/ 20 °C)
Release Time	Typical 1.5 ms (without diode parallel to coil)
Shock resistance	False Operation: Min 98m/s ² (10G) :Shock wave 11ms
	Endurance: Min 980m/s ² (100G) :Shock wave 6ms
Vibration resistance	False Operation: Min 43m/s ² (4.4G) at 10 to 500Hz
	Endurance: Min 43m/s ² (4.4G) at 10 to 500Hz
Mechanical Life (no load)	Min 10×10 ⁶ Operations(300 cycles/minute)
Electrical Life at rated load	Min 1.0×10 ⁵ Operations(1 sec. ON/ 9 sec. OFF)
Ambient Temperature range	-40°C to 85°C ,Max 85%RH
Weight	Approx. 8g

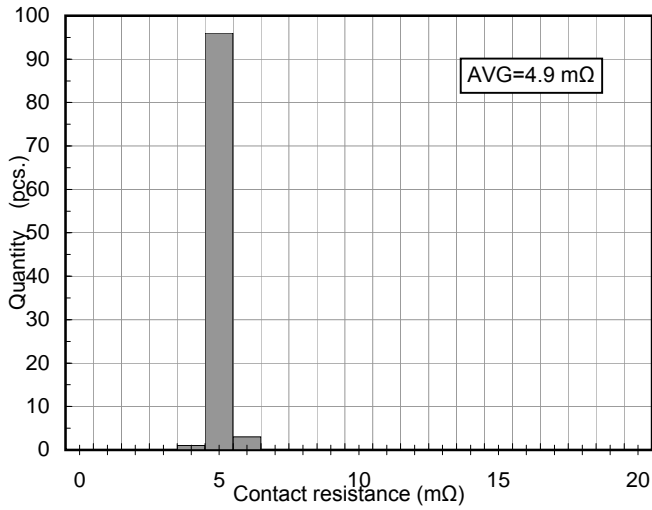
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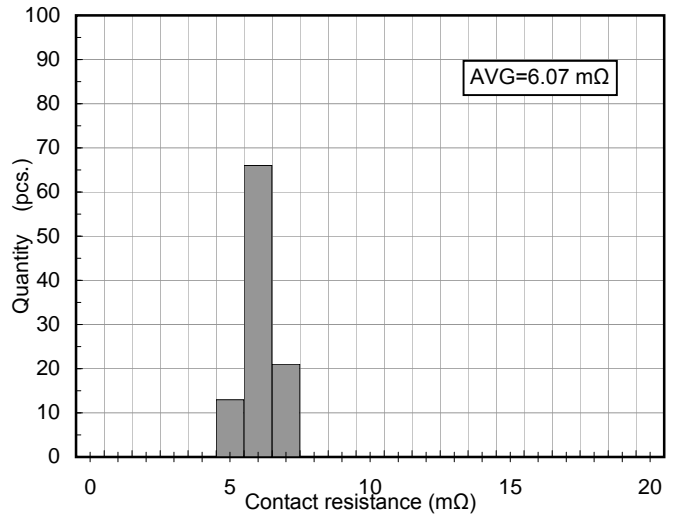
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TECHNICAL REFERENCE DATA OF THE TA1-225 RELAYS

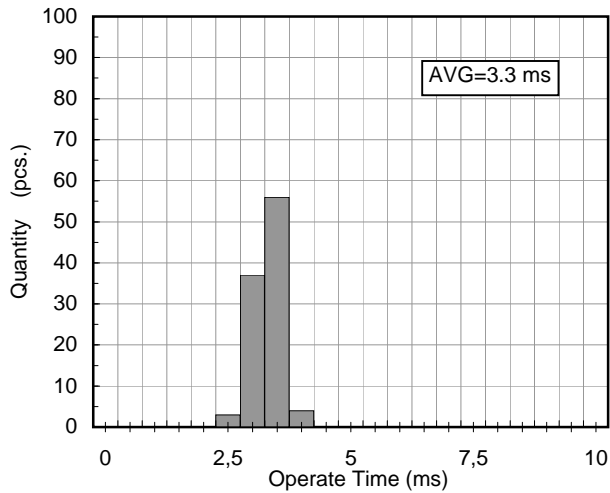
Contact Resistance of the N/O contact



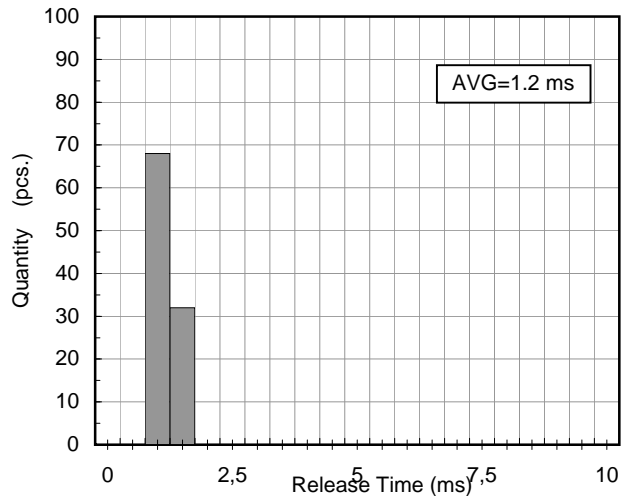
Contact Resistance of the N/C contact



Operate Time with 12 V

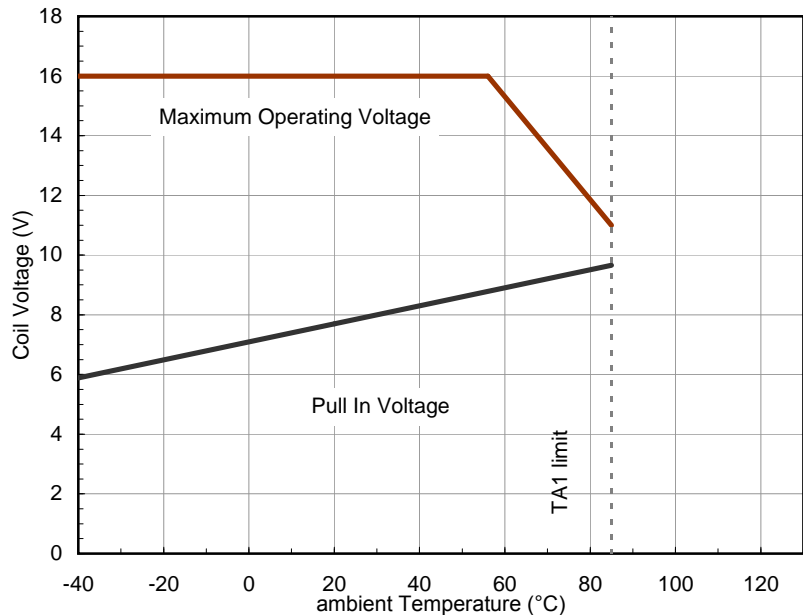


Release Time without diode



Operating Voltage Range

Please note, that this diagram shows the Pull In Voltage range for coil at ambient temperature and the Maximum Voltage is either 16 V or the voltage that over time brings the coil to the max. allowed temperature. No Load Current considered.



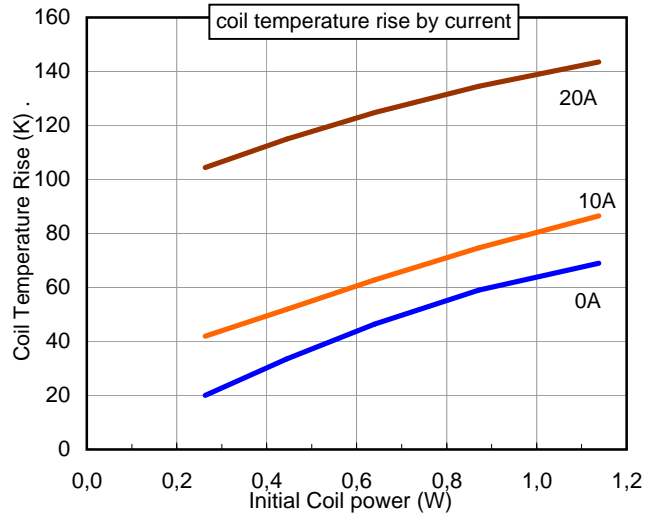
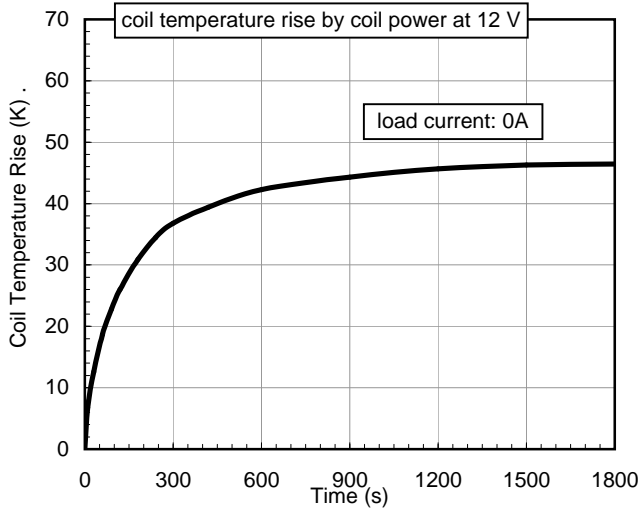
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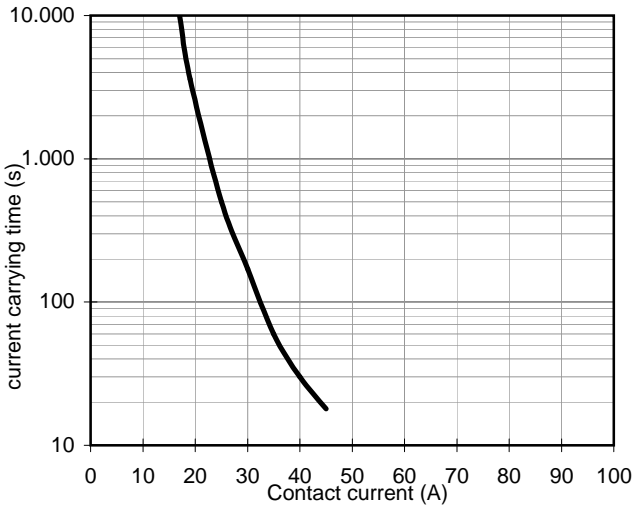
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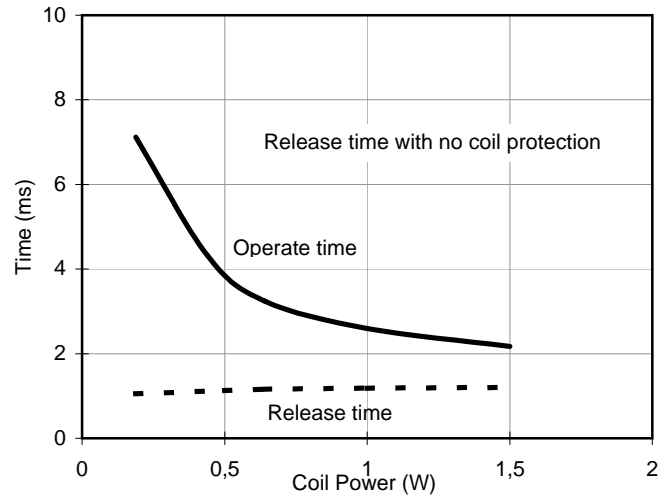
Coil temperature rise



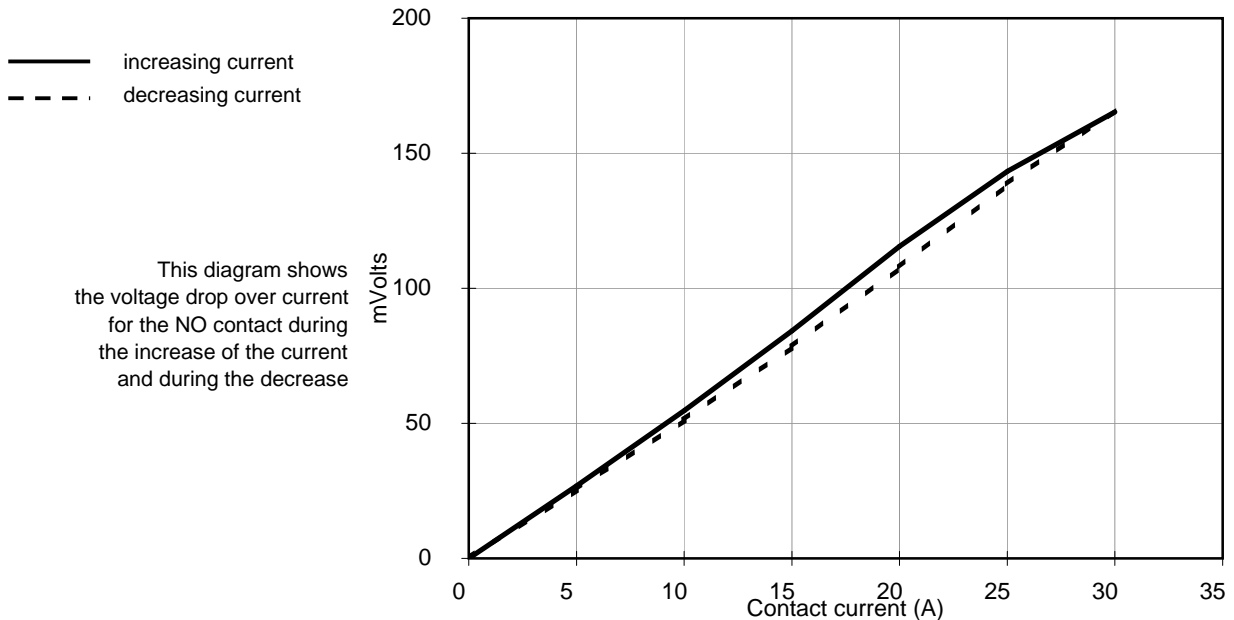
Over current limit



Operate and Release Time



Contact voltage drop over NO contact

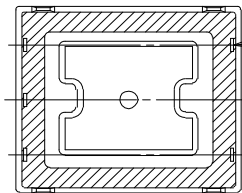
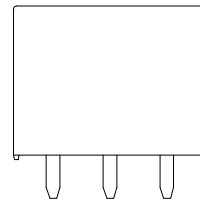
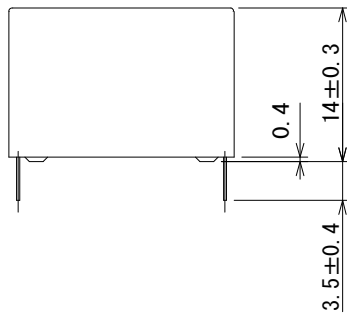
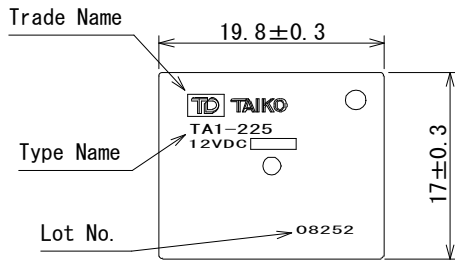


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External Dimensions / Wiring Diagram / PCB Pin Layout

Fig. 1. Exterminal dimension & marking



Terminal dimensions (Before pre-soldering)

5- t0.3 ± 0.05, W1.2 ± 0.05

- Deviation of terminal pitch is ± 0.3 at the root of terminal
- Terminal section is pre-soldered.

Height of pre-soldering.

: more than 2.5 mm from the tip of terminal.

Fig. 2. Wiring diagram

(BOTTOM VIEW)

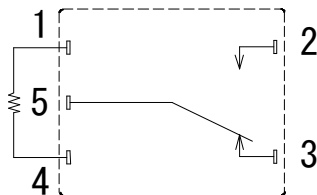
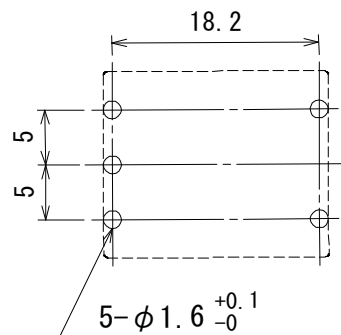


Fig. 3. PCB pin layout (Reference figure)

(BOTTOM VIEW)



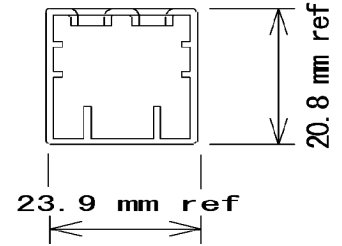
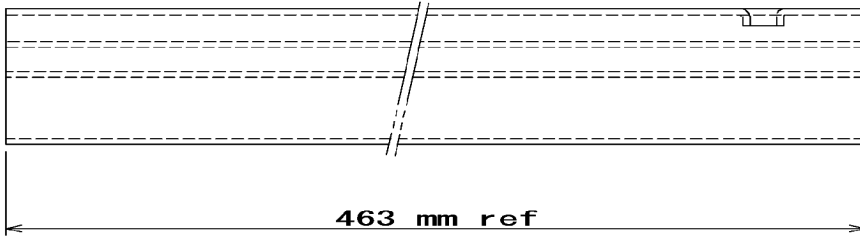
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Packaging specification

Standard Tube Packaging

25 relays per tube, 40 tubes per box (1000 relays per box)



Notes:

For further information, please contact Taiko device Techno.

Disclaimer:

The above information is for information only and with no responsibility, not binding and can be changed any time.
Taiko Device Techno cannot be held responsible for typos, or misprints.