

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

Miniature High Power PCB relay  
for motor reverse applications.

Covers a broad range of  
automotive applications.

The relays are lead free / RoHS compliant.  
Since the TE uses higher grade plastic material  
the standard version is already suitable for 125°C



**TE2**

**Available Standard Types**

TE2	High Temperature	wave solderable	125 °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
160 Ω	138 mH	0.900 W	6.5 V	0.264 W	0.8 V
110 Ω	95 mH	1.309 W	5.5 V	0.275 W	0.6 V
220 Ω	185 mH	0.655 W	7.7 V	0.270 W	0.8 V
±10%					

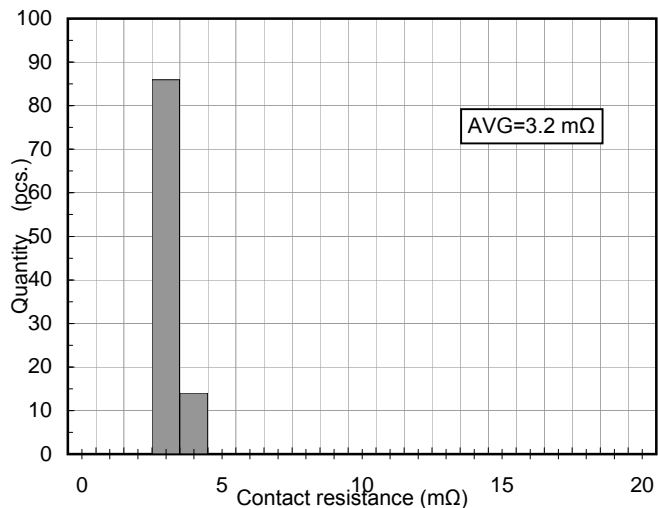
ITEM		SPECIFICATION
Contact Arrangement		H Bridge
Contact Material		AgSnO <sub>2</sub> Alloy
Contact Resistance per contact		Typical 5 mΩ (max 50mΩ at 6 VDC 1A)
Contact Rated Load		25A at 14VDC Motor load (Locked Rotor)
Max. Switching Current/ Voltage		30A at 16VDC
Max. Continuous Current at 20 °C		25A at 14VDC for 10minutes
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 ms (at 12VDC/ 20 )
Release Time		typical 1.5 ms with no diode parallel to coil
Shock resistance	False Operation	Min 98m/s <sup>2</sup> ( 10G) :Shock wave 11ms
	Endurance	Min 980m/s <sup>2</sup> (100G) :Shock wave 6ms
Vibration resistance	False Operation	Min 43m/s <sup>2</sup> ( 4.4G) at 10 to 500Hz
	Endurance	
Mechanical Life (no load)		Min 10×10 <sup>6</sup> Operations(300 cycles/minute)
Electrical Life at rated load		Min 0.1×10 <sup>6</sup> Operations(1 sec. ON/ 9 sec. OFF)
Ambient Temperature range		-40°C to 125°C ,Max 85%RH
Weight		Approx. 6.3g

# Taiko Device Techno & Co., Ltd. TE2 RELAY SPECIFICATION

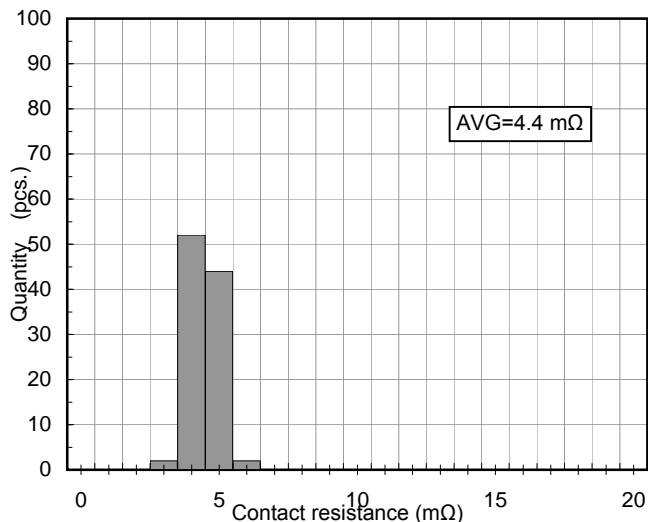
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## TECHNICAL REFERENCE DATA FOR THE TE2-160 RELAY

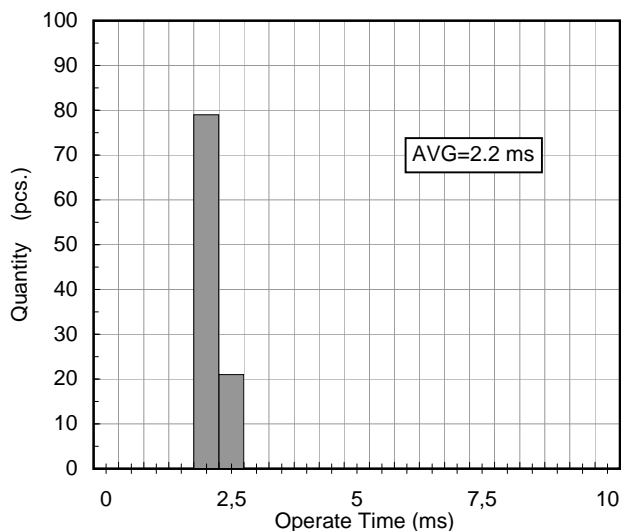
### Contact Resistance of the N/O contact



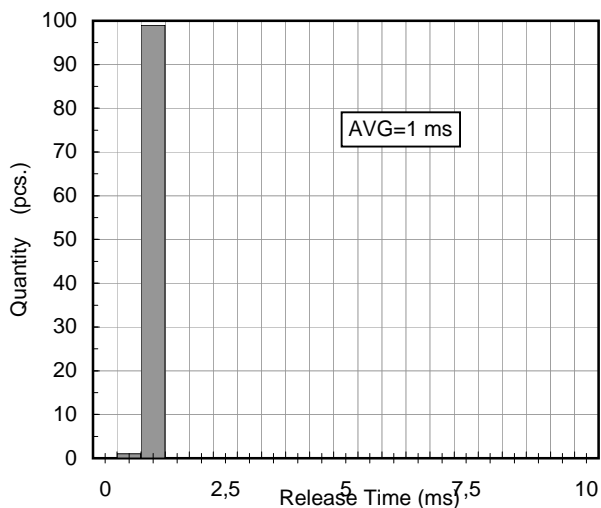
### Contact Resistance of the N/C contact



### Operate Time with 12 V

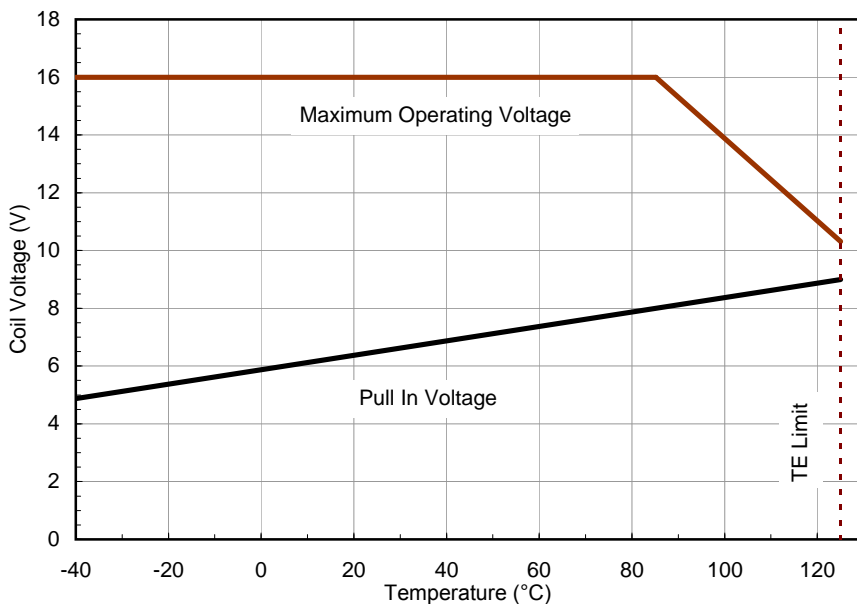


### Release Time without diode



### 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.

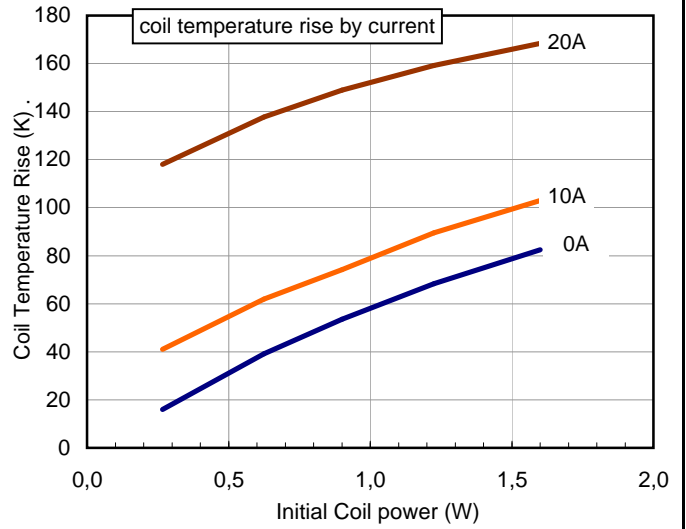
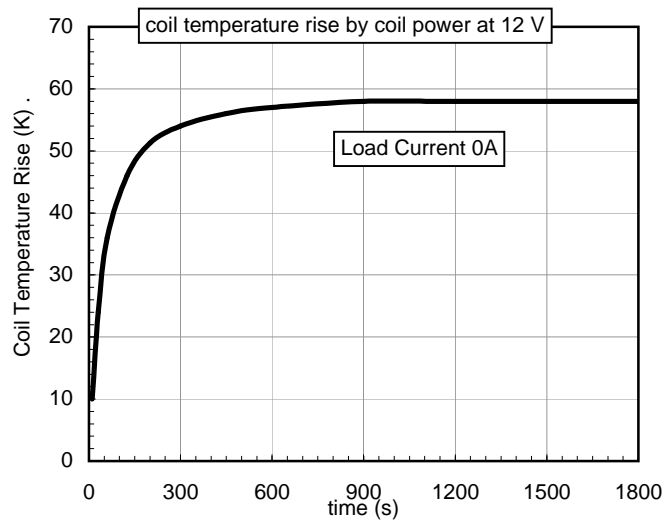


# Taiko Device Techno & Co., Ltd. TE2 RELAY SPECIFICATION

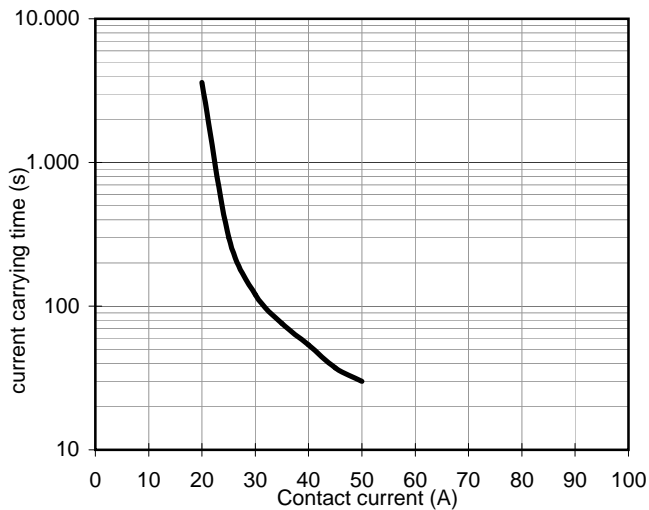
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## TECHNICAL REFERENCE DATA FOR THE TE2-160 RELAY

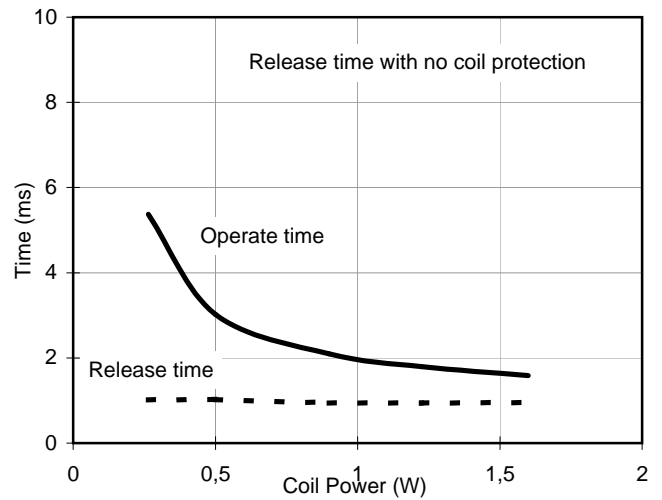
### Coil temperature rise



### Over current limit



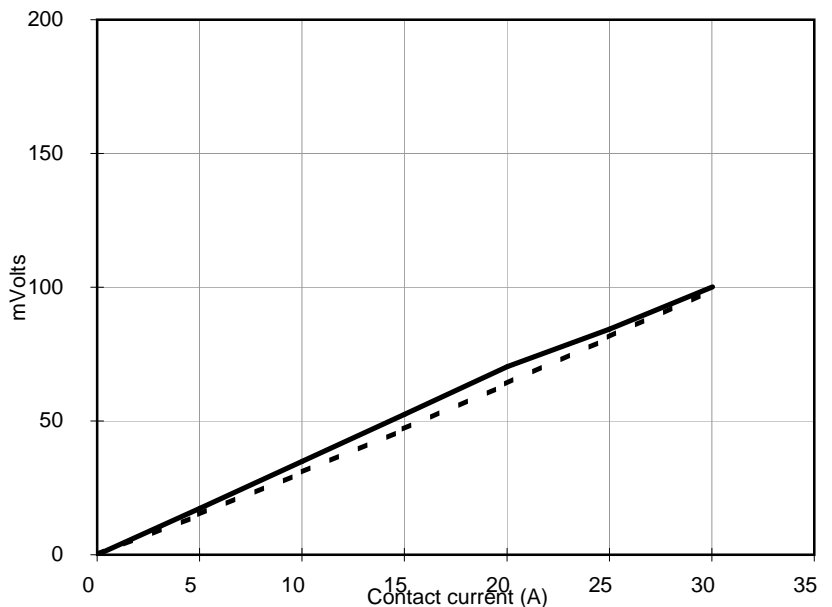
### Operate and Release Time



### Contact voltage drop over the NO contact

- increasing current
- - - decreasing current

This diagram shows the voltage drop over current for the NO contact during the increase of the current and during the decrease



# Taiko Device Techno & Co., Ltd. TE2 RELAY SPECIFICATION

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## External Dimensions / Wiring Diagram / PCB Pin Layout

Fig 1 : External Dimensions

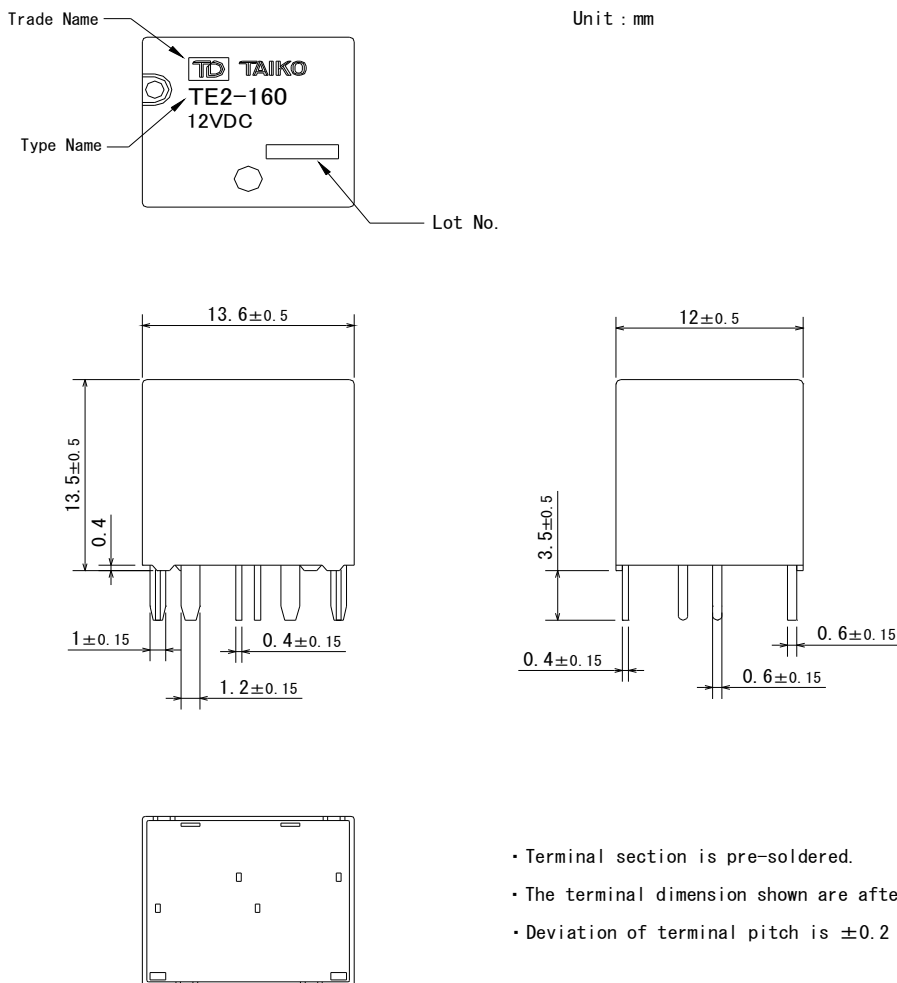


Fig.2. Wiring diagram  
(BOTTOM VIEW)

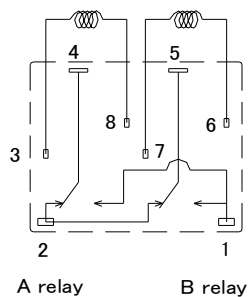
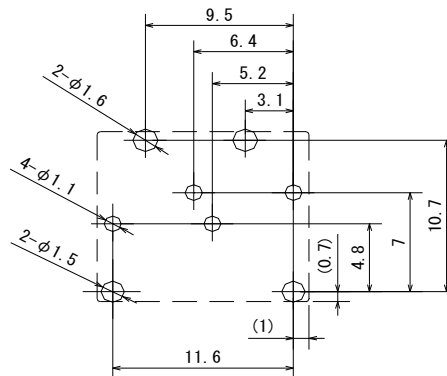


Fig.3. PCB pin layout (Reference figure)  
(BOTTOM VIEW)



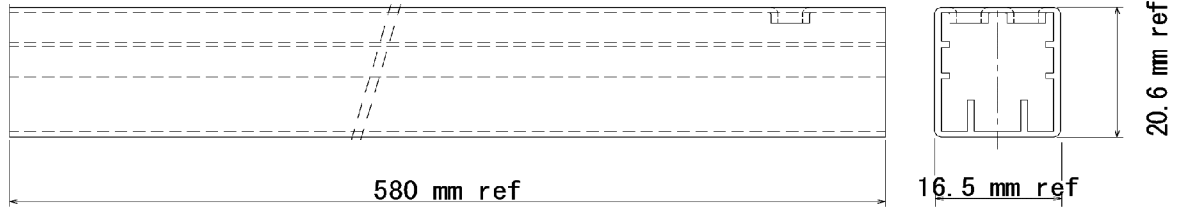
Taiko Device Techno & Co., Ltd.  
TE2 RELAY SPECIFICATION

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**Packaging specification**

Standard Tube Packaging

40 relays per tube, 50 tubes per box (2000 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.