



## WORCD Series Single Phase DC Output

### Product Description

- MOSFET Output (4A) or Transistor Output (1A)
- Control Voltage: 15VDC, 12VDC, 24VDC
- Load Current: 1A, 4A
- Dielectric Strength: 2500Vrms
- PCB Mounted
- RoHS Compliant



### Ordering Information

WORCD	30	D	1	-12	T	(XXX)
WORCD Series	Load Voltage 30: 3-30VDC 60: 0-35VDC	DC Control	Load Current (1) 1: 1Amp 4: 4Amp	Control Voltage 5: 5VDC 12: 12VDC 24: 24VDC	Blank: Standard T Pin Layout: T type Footprint	Customized Code

(1) MOSFET Output (4A) or Transistor Output (1A)

Note: Part numbers available are listed in the table below.

Control Voltage	1A	4A
5VDC	WORCD30D1-5(T)	WORCD60D4-5(T)
12VDC	WORCD30D1-12(T)	WORCD60D4-12(T)
24VDC	WORCD30D1-24(T)	WORCD60D4-24(T)

### General Specifications

Input Specifications (Ta=25℃)		
Control Voltage Range	5	4-6VDC
	12	9.6-14.4VDC
	24	19.2-28.8VDC
Must Turn-on Voltage	5	4VDC
	12	9.6VDC
	24	19.2VDC
Must Turn-off Voltage	1VDC	
Maximum Input Current	5	25mA@6VDC

	12	25mA@14.4VDC
	24	25mA@28.8VDC

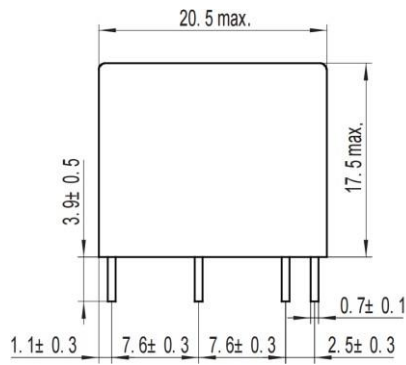
Output Specifications (Ta=25℃)		
Load Voltage Range	30VDC	3-30VDC
	60VDC	0-35VDC
Maximum Transient Overvoltage	3-30VDC	30Vpk
	3-30VDC	70Vpk
Load Current Range	1A	0.02-1A
	4A	0.02-4A
Maximum Surge Current (@10ms)	1A	4Apk
	4A	20Apk
Maximum On-state Voltage Drop @Rated Current	30VDC	1.5V
	60VDC	0.5V
Maximum Turn-on Time	1ms	
Maximum Turn-off Time	1ms	
Maximum Off-State Leakage Current @Rated Load Voltage	0.1mA	

General Specifications (Ta=25℃)	
Dielectric Strength (50/60Hz)	2500Vrms
Minimum Insulation Resistance (@500VDC)	1000MΩ
Ambient Temperature Range	-30℃ ~ +80℃
Storage Temperature Range	-30℃ ~ +100℃
Weight (Typical)	3g

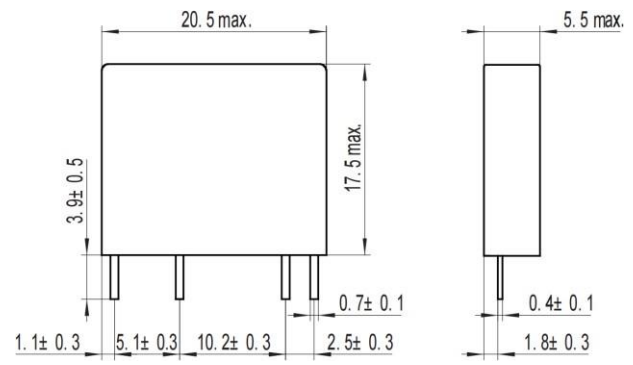
## Applications

Suitable for DC motors, DC power supplies, electro-mechanic devices, and etc.

## Outline Dimensions

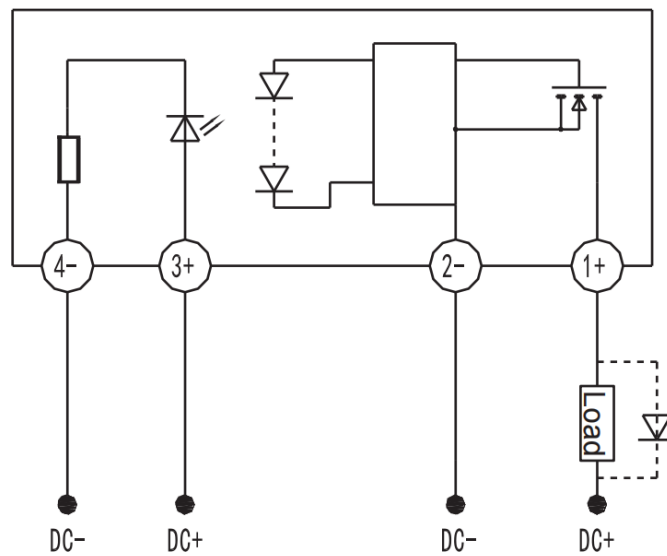


Standard Footprint

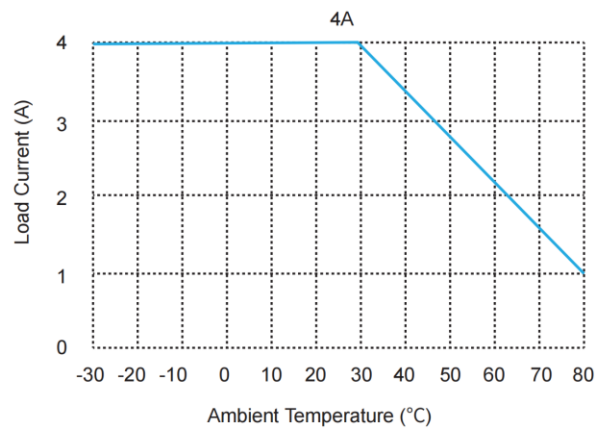
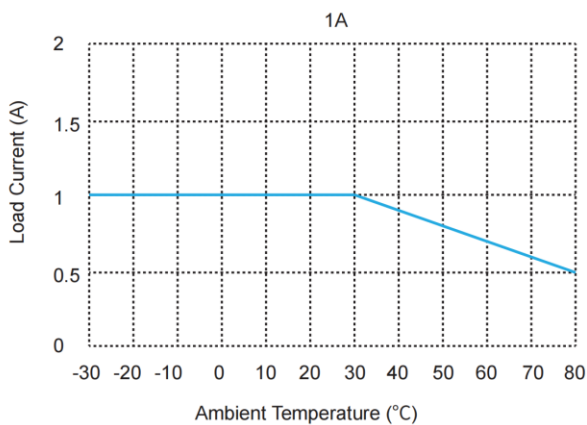


T Type Footprint

## Wiring Diagram



## Thermal Derating Curve



## General Notes

1. Soldering must be finished within 10 seconds at 260°C, or finished within 5 seconds at 350°C. Otherwise it may cause damage to the relay.
2. Terminal polarity must be observed. Otherwise it may cause damage to the relay.

3. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.
4. Capacitive load will produce very high surge current at the moment of conduction, which may lead to the damage of solid state relay due to the excessive surge current. Therefore, if the actual load is capacitive, or the load has paralleled large capacitance, it is strongly recommended that NTC should be connected in series in the load loop to suppress surge current in order to avoid damage to the product.

## **! Warnings**

1. The product's side panels may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power.

## **CONTACT INFORMATION**

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For additional information, please contact your local Sales Representative.

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## Product Specification Statement

1. The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.
2. The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.
3. WAYON strives to provide accurate and up-to-date information to the best of our ability. However, due to technical, human, or other reasons, WAYON cannot guarantee that the information provided in the product specification is entirely accurate and error-free. WAYON shall not be held responsible for any losses or damages resulting from the use or reliance on any information in these product specifications. WAYON reserves the right to revise or update the product specification and the products at any time without prior notice, and the user's continued use of the product specification is considered an acceptance of these revisions and updates. Prior to purchasing and using the product, users should verify the above information with WAYON to ensure that the product specification is the most current, effective, and complete. If users are particularly concerned about product parameters, please consult WAYON in detail or request relevant product test reports. Any data not explicitly mentioned in the product specification shall be subject to separate agreement.
4. Users are advised to pay attention to the parameter limit values specified in the product specification and maintain a certain margin in design or application to ensure that the product does not exceed the parameter limit values defined in the product specification. This precaution should be taken to avoid exceeding one or more of the limit values, which may result in permanent irreversible damage to the product, ultimately affecting the quality and reliability of the system or equipment.
5. The design of the product is intended to meet civilian needs and is not guaranteed for use in harsh environments or precision equipment. It is not recommended for use in systems or equipment such as medical devices, aircraft, nuclear power, and similar systems, where failures in these systems or equipment could reasonably be expected to result in personal injury. WAYON shall assume no responsibility for any consequences resulting from such usage.
6. Users should also comply with relevant laws, regulations, policies, and standards when using the product specification. Users are responsible for the risks and liabilities arising from the use of the product specification and must ensure that it is not used for illegal purposes. Additionally, users should respect the intellectual property rights related to the product specification and refrain from infringing upon any third-party legal rights. WAYON shall assume no responsibility for any disputes or controversies arising from the above-mentioned issues in any form.