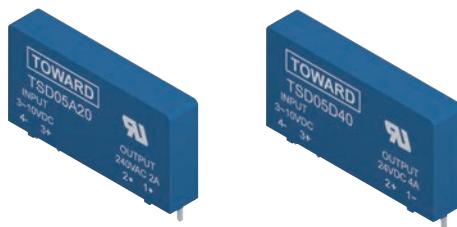


# TS Series

*D/D·D/A·Load Current:2.0~4.0A*

## Features

- Optically isolated
- Low On-state resistance
- Low input power consumption
- MOSFET output thyristor(VDC)



## Applications

- Household appliance
- Temperature control system
- Industrial automatic control
- Lighting system
- Office appliances
- Factory appliances

## Order Code:

TS D05 A20

a b c

a : Model : TS = SLIM Type

b : Input Voltage : D05 = DC5V ; D12 = DC12V ;

D24 = DC24V ; D48 = DC48V ;

c : Output Current : A20 = AC2.0A ; D25 = DC2.5A ; D40 = DC4.0A

## Specifications (AC Output)

### Input Circuit

Type No	TSD05A20	TSD12A20	TSD24A20
Nominal Voltage	5VDC	12VDC	24VDC
Control Voltage Range	3~10VDC	7~20VDC	18~30VDC
Control Current	12mA	10mA	7.7mA
Release Voltage		1VDC	
Input Internal Resistor	300Ω	1010Ω	3000Ω

### General Characteristics

Operating Temperature Range	-20°C ~+80°C
Storage Temperature Range	-40°C ~+100°C
Input - Output Isolation	3.5KV rms, 1Minute (for Input-Output)
Max. Soldering Heat	260°C (10 Sec)
Weight	4g

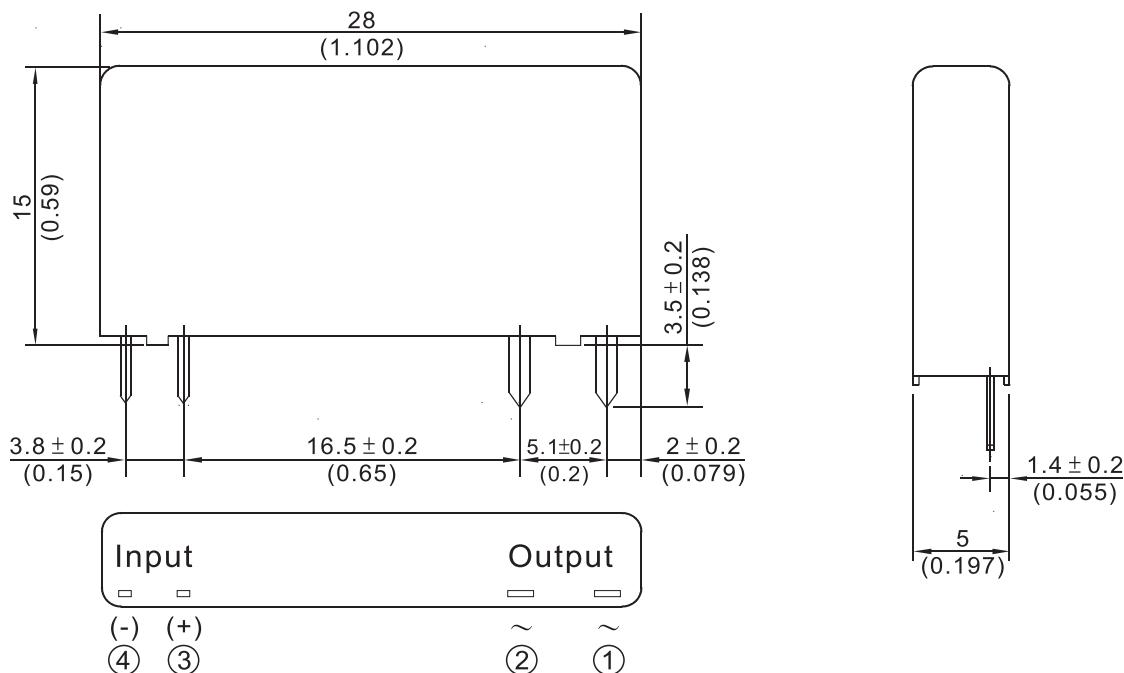
為了持續的改進，敝司有權在不影響規格範圍的情況下修改設計。

In the interest of continuous development, our companies reserve the right to alter designs within specification range.

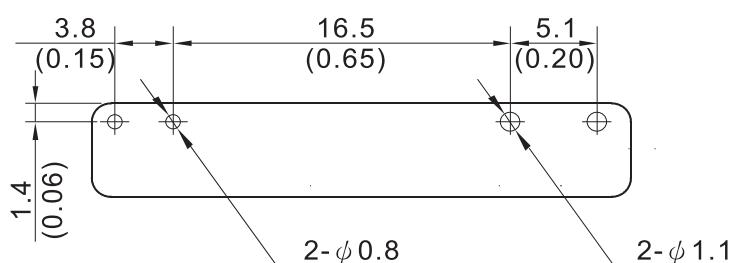
S.S.R.

Output Characteristics (at 20°C )	
Load Voltage	240 Vrms
Operating Range	12~280 Vrms
Peak Voltage (Clamping Voltage)	600 V
Nominal Current	2A
Non-Repetitive Overload Current	80A
On-State Drop Voltage	1.2V
Off-State Leakage Current	<1.5mA
Min. Load Current	50mA
Turn-On Time (at Nominal Voltage)	100 μs(Random-on)/10ms(Zero-on)
Turn-Off Time (at Nominal Voltage)	10 mS
Operating Switching Frequency	47~400Hz
Off-State dv/dt	500V/ μs
RC Sunbber	10nF,100Ω

### Dimensions : (Unit : mm)



### P.C.B. Layout (TOP View)



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**Specifications (DC Output)**

Input Circuit				
Type No (2.5A/48VDC)	TSD05D25	TSD12D25	TSD24D25	TSD48D25
Nominal Voltage	5VDC	12VDC	24VDC	48VDC
Control Voltage Range	3~10VDC	7~20VDC	18~30VDC	38~58VDC
Control Current	12mA	10mA	7.7mA	4.4mA
Release Voltage	1.8V	3.6V	8.3V	8.3V
Input Internal Resistor	320Ω	1070Ω	3000Ω	10800Ω
Type No (4A/24VDC)	TSD05D40	TSD12D40	TSD24D40	TSD48D40
Nominal Voltage	5VDC	12VDC	24VDC	48VDC
Control Voltage Range	3~10VDC	7~20VDC	18~30VDC	38~58VDC
Control Current	12mA	10mA	7.7mA	4.4mA
Release Voltage	1.8V	3.6V	8.3V	8.3V
Input Internal Resistor	320Ω	1070Ω	3000Ω	10800Ω

General Characteristics	
Operating Temperature Range	-20°C ~+80°C
Storage Temperature Range	-25°C ~+80°C
Input - Output Isolation	2.5KV rms, 1Minute (for Input-Output)
Max. Soldering Heat	260°C (10 Sec)
Weight	4g

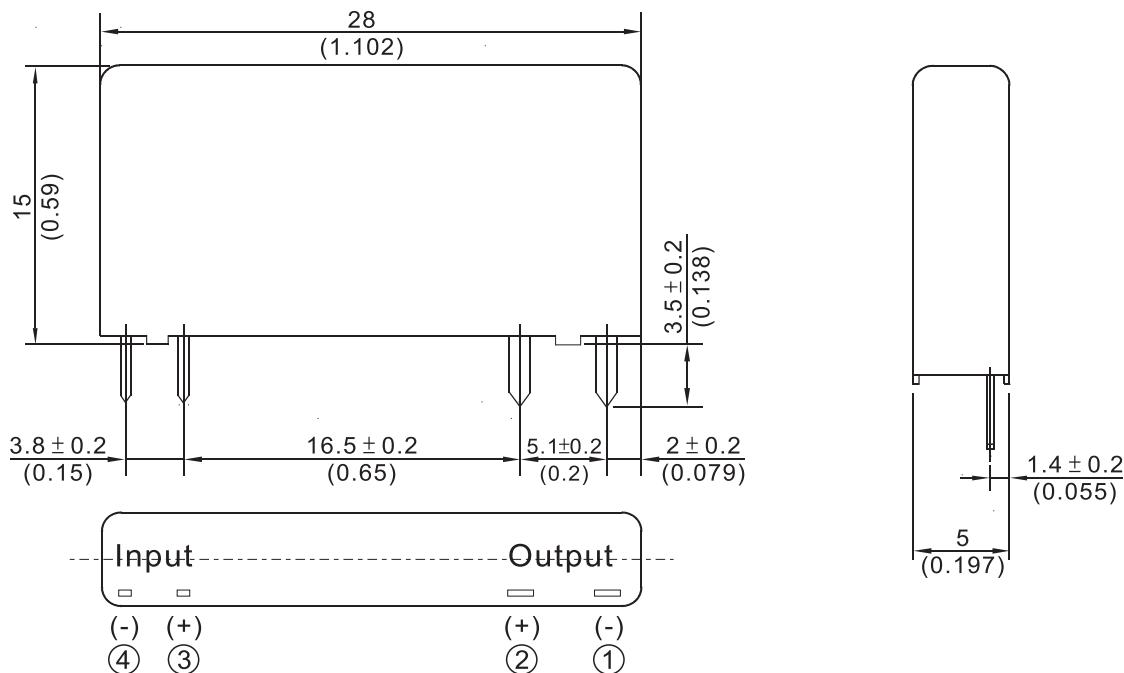
Output Characteristics (at 20°C )	TSD**D25	TSD**D40
Load Voltage	48V	24V
Operating Range	0~60V	0~32V
Nominal Current	2.5A	4A
Non-Repetitive Overload Current	6A	7A
On-State Drop Voltage (at IL=2A)	0.4V	0.24V
Static Output On-Resistance (at IL=2A)	200mΩ	120mΩ
Off-State Leakage Current	<1mA	<1mA
Minimum Load Current	1mA	1mA
Turn-On Time (at Nominal Voltage)	150 μs	150 μs
Turn-Off Time (at Nominal Voltage)	600 μs	600 μs
Operating Switching Frequency	10Hz	10Hz
Transient Voltage Suppressor	YES	YES
Breakdown Voltage	60V	36V
Peak Power Dissipation	600W	600W
Peak Voltage (Clamping Voltage)	100V	60V

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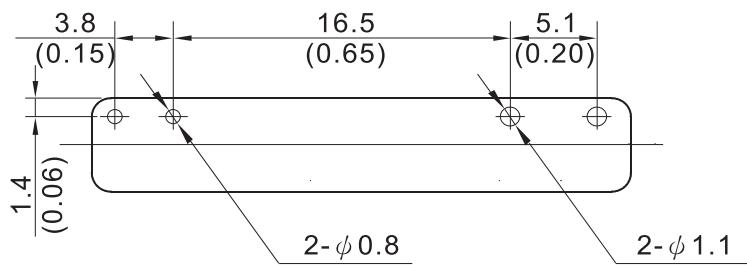
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S.S.R.

## Dimensions : (Unit : mm)



## P.C.B. Layout (TOP View)



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BRIGHT TOWARD INDUSTRIAL CO.,LTD.

TS Series. REV.06/2017