

# TB3063S

## Features

- Compact SOP package
- 600V peak blocking voltage
- Isolation voltage between input and output (Viso : 3750Vrms)
- Simplifies logic control of 115/240 VAC power
- Zero voltage crossing



## Applications

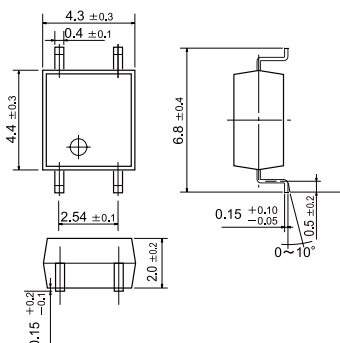
- Solenoid/valve controls
- Lighting controls
- Static power switches
- AC motor drives
- Temperature controls
- AC motor starters
- Solid state relays
- Programmable controllers

## Part Identifications

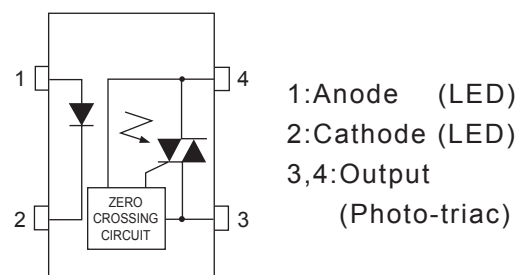
SOP Type SOP		Quantity
Tube	Tape & Reel	
	Feed Direction:Pin No.3,4	Feed Direction:Pin No.1,2
TB 3063S	TB3063S - R1	TB3063S - R2
		Tube 100 pcs Tape 1000 pcs

## Dimensions (Unit : mm) & Terminal Identification

### TB3063S dimensions



### Terminal Identification



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.

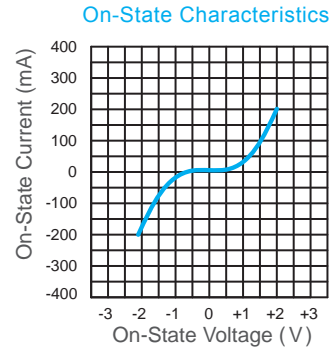
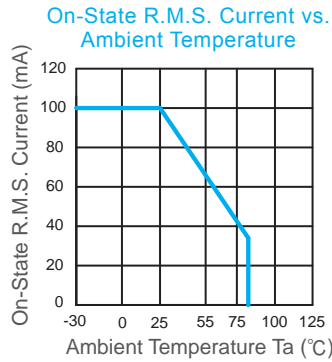
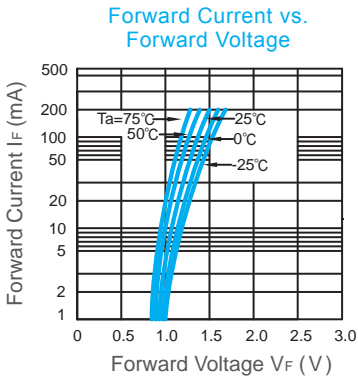
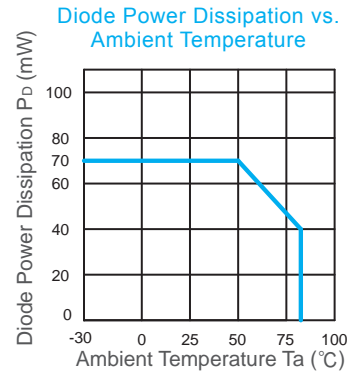
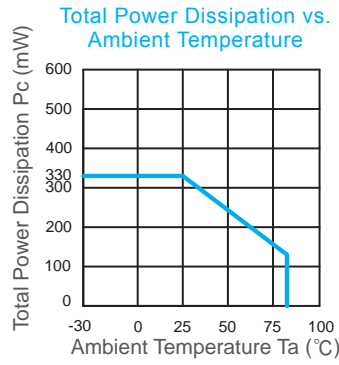
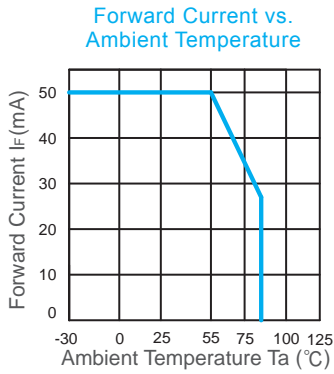
## Absolute Maximum Ratings (Ambient Temperature : 25°C )

Item		Symbol	Value
Input 輸入	Continuous LED Current	I <sub>F</sub>	50mA
	Peak LED Current (f=100 Hz,Duty=1%)	I <sub>FP</sub>	1A
	LED Reverse Voltage	V <sub>R</sub>	6V
	Input Power Dissipation	P <sub>IN</sub>	70mW
Output 輸出	Load Voltage	V <sub>L</sub>	600V (peak)
	Load Current	I <sub>L</sub>	100mA
	Peak Load Current (1ms,1 shot)	I <sub>PEAK</sub>	1A
	Output Power Dissipation	P <sub>OUT</sub>	300mW
Total Power Dissipation		P <sub>T</sub>	330mW
I/O Breakdown Voltage		V <sub>I/O</sub>	3750 Vrms
Operating Temperature		T <sub>OPR</sub>	-40°C ~ +85°C
Storage Temperature		T <sub>STG</sub>	-50°C ~ +120°C
Soldering Temperature 10 Second		T <sub>sol</sub>	260°C

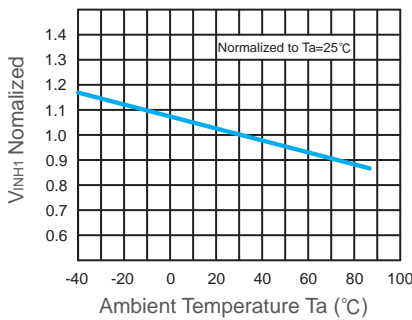
## Electrical Specifications (Ambient Temperature : 25°C )

Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V <sub>F</sub>		1.2	1.4	V	I <sub>F</sub> =10mA
	Recovery Current	I <sub>R</sub>			10	μ A	V <sub>R</sub> =5V
Output	Peak Blocking Current	I <sub>DRM</sub>			500	nA	I <sub>F</sub> =0mA, V <sub>DRM</sub> =600V
	ON-State Voltage	V <sub>TM</sub>		1.7	3	V	I <sub>T</sub> =100mA
Transfer Characteristics	Holding Current	I <sub>H</sub>		0.1		mA	
	Critical Rate Of Rise Of OFF-state Voltage	dv/dt	600			V/uS	V <sub>DRM</sub> =(1/2)xRated
	Inhibit Voltage (MT1-MT2 Voltage Above Which Device Not Trigger)	V <sub>INH</sub>		10	20	V	I <sub>F</sub> =5mA
	Leakage In Inhibited State	I <sub>DRM2</sub>			500	μ A	I <sub>F</sub> =Rated, I <sub>FT</sub> =Rated, V <sub>DRM</sub> =OFF-State
	Isolation Resistance	R <sub>ISO</sub>	5x10 <sup>10</sup>	10 <sup>11</sup>		Ω	DC500V
	Minimum Trigger Current	I <sub>FT</sub>		1.5	5	mA	

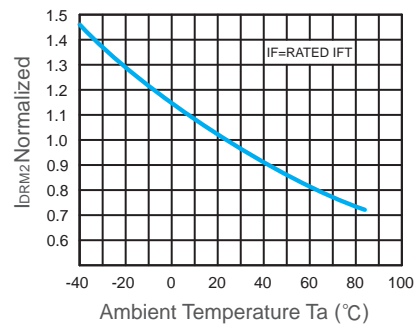
Photo Coupler



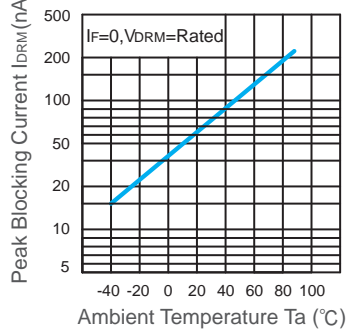
**Inhibit Voltage vs. Temperature**



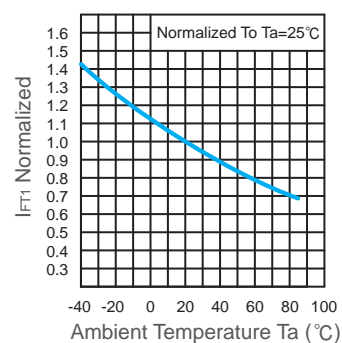
**L<sub>DRM2</sub>, Leakage In Inhibit State vs. Temperature**



**Leakage with LED off vs. Ambient Temperature**




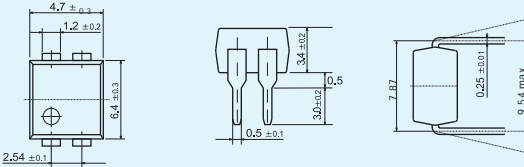
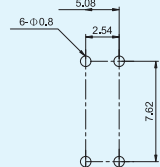

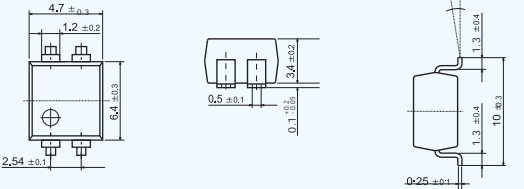
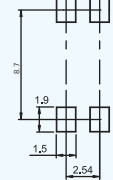

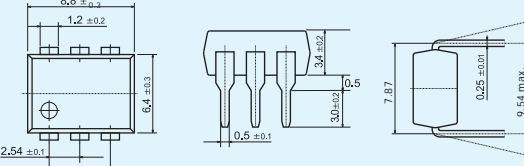
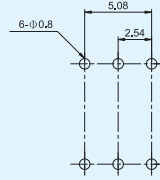

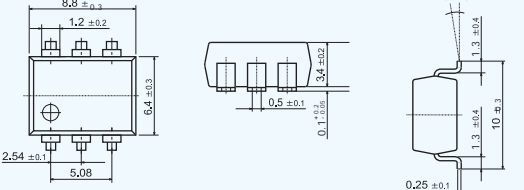
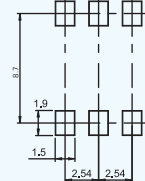

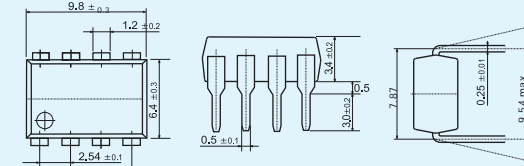
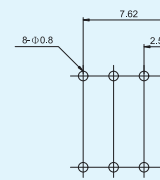

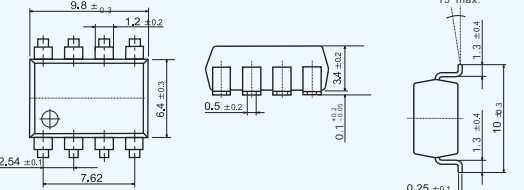
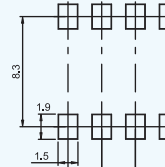
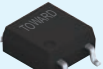
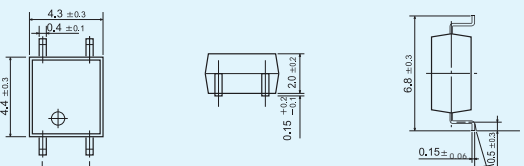
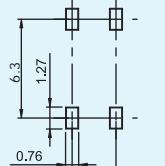

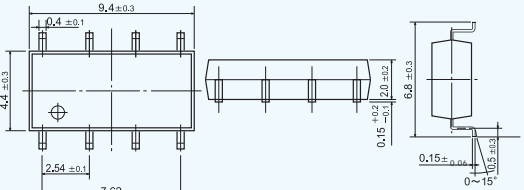
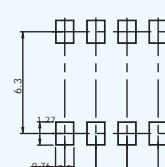
**Trigger Current vs. Ambient Temperature**



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.

Package & PC Board Pattern

Package 包裝	Dimensions 外型尺寸圖	PC Board pattern PC 板加工圖
 <p>DIP4</p>		 <p>(Bottom View)</p>
 <p>SMD4</p>		 <p>(Top View)</p>
 <p>DIP6</p>		 <p>(Bottom View)</p>
 <p>SMD6</p>		 <p>(Top View)</p>
 <p>DIP8</p>		 <p>(Bottom View)</p>
 <p>SMD8</p>		 <p>(Top View)</p>
 <p>SOP4</p>		 <p>(Top View)</p>
 <p>SOP8</p>		 <p>(Top View)</p>

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Packing Specifications

Package Type 包裝類型	Tape shape & dimensions 形狀和尺寸	Reel shape & dimensions 圈帶形狀和尺寸	Quantity 數量
4 Pin SOP			1000 pcs
8 Pin SOP			1000 pcs
4 Pin SMD			1000 pcs
6 Pin SMD			1000 pcs
8 Pin SMD			1000 pcs

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Load Connecting Method

Type 類型	Load 負荷	Connection 接續方法	Feature 特長
4 pin	AC or DC		Control bi-directional signal 可控制雙向信號
6 pin	A AC or DC		Control bi-directional signal 可控制雙向信號
	B DC		On-Resistance is 1/2 of A-connection 導通電阻值是 A 接法的 1/2 2-Make-contacts (Source Common)
C DC		On-Resistance is 1/2 of B-connection 導通電阻值是 B 接法的 1/2	
8 pin	AC or DC		2 input and 2 output 2 入力和 2 出力回路
			1 input and 2 output 1 入力和 2 出力回路

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