

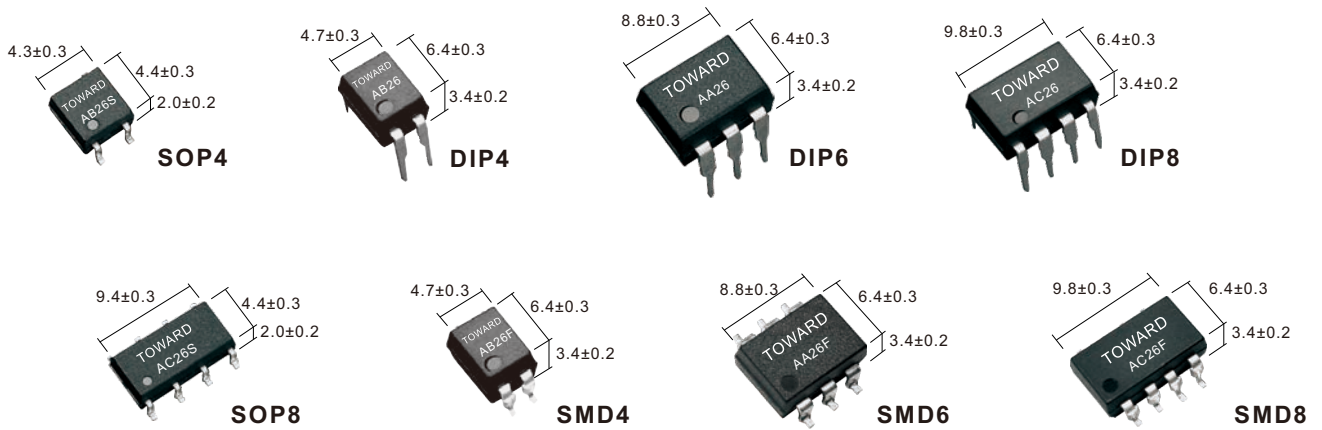
2.0A · 1a/2a

Features

- Contact Form
- Load Voltage
- Operation LED Current
- Load Current
- On-Resistance
- Output Capacitance
- Low Off-State Leakage Current
- Suffix -H for DIP/SMD I/O Breakdown Voltage
- Suffix -H for SOP I/O Breakdown Voltage

- 1a / 2a**
- 40 V Max.
 - 3.0mA Max.
 - 2.0A Max.
 - 0.085Ω Typ.
 - 240 pF Typ.
 - 1.0μA Max.
 - 5000Vrms Min.
 - 3750Vrms Min.

Outline:(Unit:mm) pitch:2.54 mm



Terminal Identification 電路結構圖

| Terminal Identification | | |
|---|---|---|
| AB26(F)(S) | AA26(F) | AC26(F)(S) |
| | | |
| <p>1: Anode (LED) 2: Cathode (LED) 3,4: Drain (MOS FET)</p> | <p>1: Anode (LED) 2: Cathode (LED) 3: NC 4,6: Drain (MOS FET) 5: Source (MOS FET)</p> | <p>1,3: Anode (LED) 2,4: Cathode (LED) 5,6,7,8: Drain (MOS FET)</p> |

PhotoMOS-FET Relay
Hi-Current

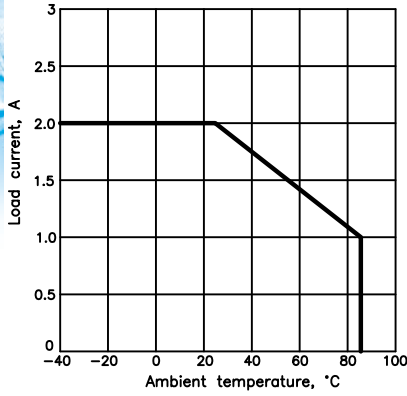
Absolute Maximum Ratings 絕對最大定格 (Ambient Temperature 周圍溫度 : 25°C)

| Item | | Symbol | Value | | | | |
|---|--|-------------------|---------------------|------|--------------------|------|----------------|
| Outline Package | | | SOP 4/8 | | DIP 4/8 SMD 4/8 | | DIP 6 SMD 6 |
| | | | 1CH | 2CH | 1CH | 2CH | 1CH |
| Input 輸入 | Continuous LED Current 連續的LED電流 | I _F | 50mA | | | | |
| | Peak LED Current LED的峰值電流(f=100 Hz, duty=1%) | I _{FP} | 500mA | | | | |
| | LED Reverse Voltage 逆向的LED電壓 | V _R | 5V | | | | |
| | Input Power Dissipation 容許損失 | P _{In} | 75mW | | | | |
| Output 輸出 | Load Voltage 負荷電壓 | V _L | 40V (AC peak or DC) | | | | |
| | Load Current 負荷電流 (A) | I _L | 2.0 | 1.6 | 2.0 | 2.0 | 2.0 |
| | Peak Load Current 峰值負荷電流 (1 ms, 1 shot) (A) | I _{Peak} | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | Output Power Dissipation 電流損耗 (mW) | P _{Out} | 350 | 450 | 450 | 600 | 450 |
| Total Power Dissipation 全損耗 (mW) | P _T | 400 | 500 | 500 | 650 | 500 | |
| I/O Breakdown Voltage 入/出力間絕緣電壓 (V _{rms}) | V _{I/O} | 1500 | 1500 | 3750 | 3750 | 3750 | |
| Operating Temperature 使用時周圍溫度 | T _{Opr} | -40°C ~ +85°C | | | | | |
| Storage Temperature 周圍保存溫度 | T _{Stg} | -40°C ~ +100°C | | | | | |

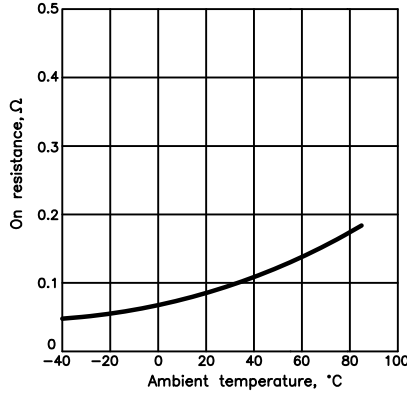
Electrical Specifications LED順向電壓 (Ambient Temperature 周圍溫度 : 25°C)

| Item | | Symbol | MIN. | TYP. | MAX. | Units | Conditions |
|--------------------|---|--------------------|-----------------|-------|------|-------|--|
| Input 輸入 | LED Forward Voltage LED順向電壓 | V _F | 1.0 | 1.37 | 1.5 | V | I _F =10mA |
| | Operation LED Current LED的動作電流 | I _{F On} | | 0.5 | 3.0 | mA | |
| | Recovery LED Voltage LED的恢復電壓 | V _{F Off} | 0.5 | 1.1 | | V | |
| Output 輸出 | On-Resistance 導通電阻 Drain to Drain | R _{On} | | 0.085 | 0.5 | Ω | I _F =5mA, I _L =Rating Time to flow is within 1sec. |
| | Off-State Leakage Current 開路狀態時的電流 | I _{Leak} | | | 1.0 | μA | V _L =40V |
| | Output Capacitance 輸出端容量 | C _{Out} | | 240 | | pF | V _L =0V, f=1MHz |
| Transmission 傳達 | Turn-On Time 動作時間 | T _{On} | | 0.5 | 2.5 | ms | I _F =5mA I _L =Rating (for SOP type) |
| | Turn-Off Time 復位時間 | T _{Off} | | 0.04 | 0.5 | ms | |
| | Turn-On Time 動作時間 | T _{On} | | 0.5 | 2.5 | ms | I _F =10mA, I _L =Rating (for DIP/SMD type) |
| | Turn-Off Time 復位時間 | T _{Off} | | 0.05 | 0.5 | ms | |
| Coupled 結合 | I/O Insulation Resistance 輸入/出間的絕緣阻抗 | R _{I/O} | 10 ⁹ | | | Ω | |
| | I/O Capacitance 輸入/力端的靜電容量 | C _{I/O} | | 1.3 | | pF | f=1MHz |

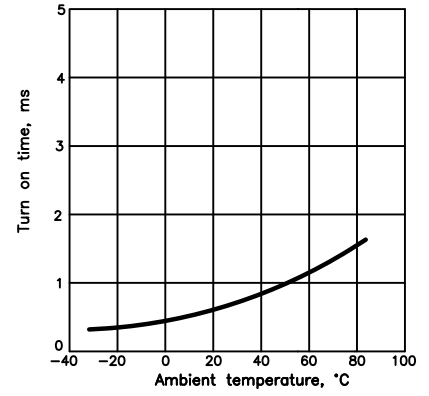
Load current Vs. Ambient temperature



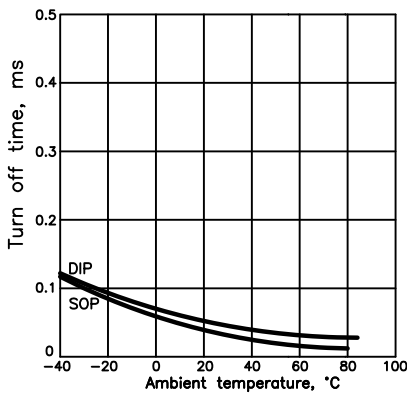
On resistance Vs. Ambient temperature



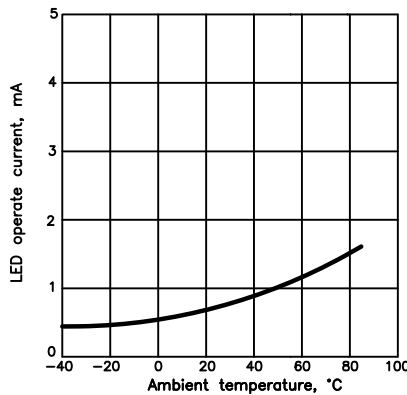
Turn on time Vs. Ambient temperature



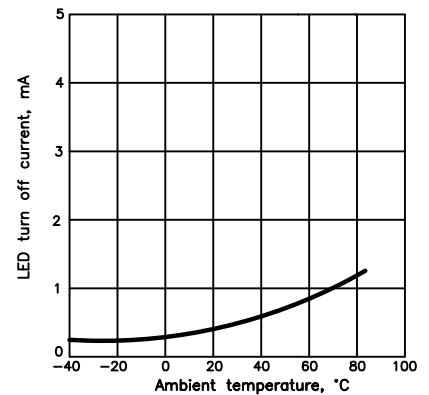
Turn off time Vs. Ambient temperature



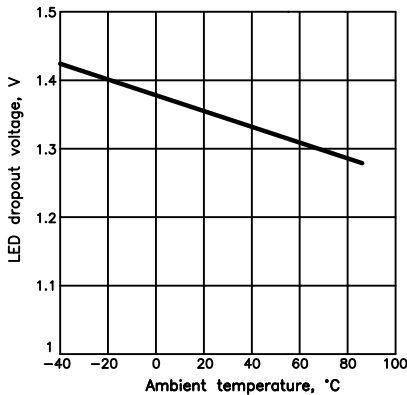
LED operate current Vs. Ambient temperature



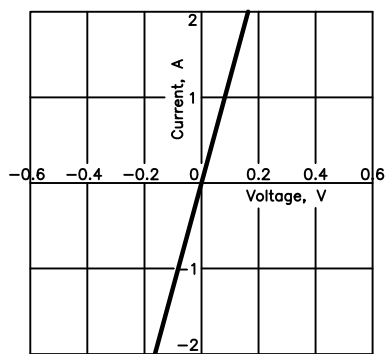
LED Turn off current Vs. Ambient temperature



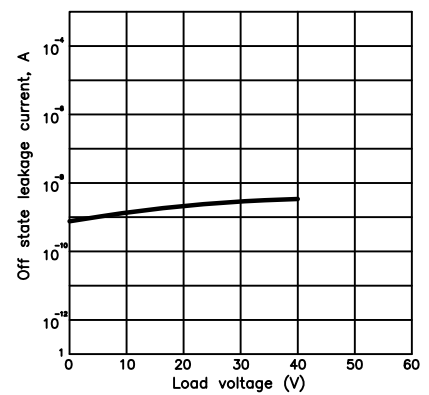
LED forward voltage Vs. Ambient temperature



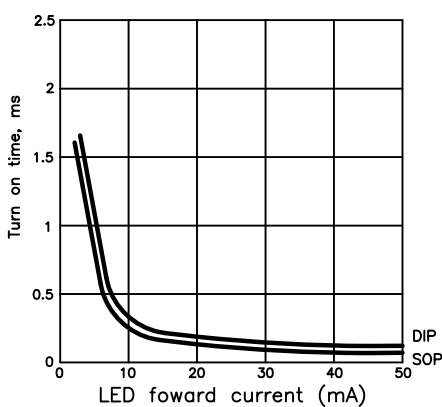
Voltage Vs. current characteristics of output at MOS portion



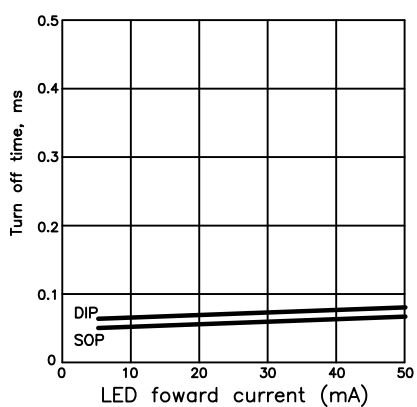
Off state leakage current Vs. Load voltage characteristics



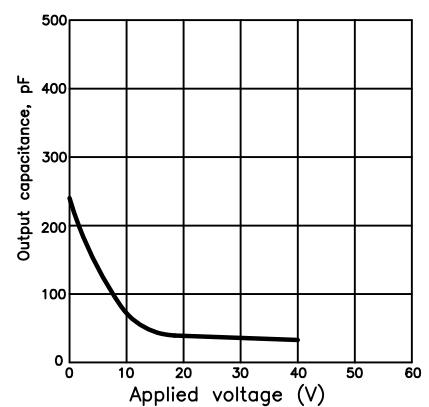
LED forward current Vs. turn on time characteristics



LED forward current Vs. turn off time characteristics


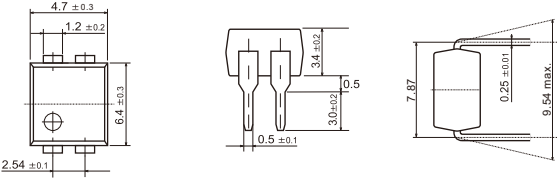
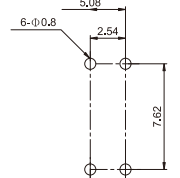

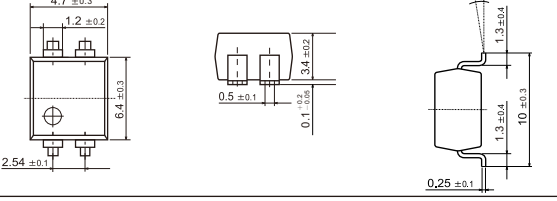
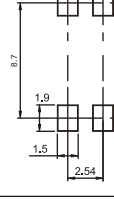

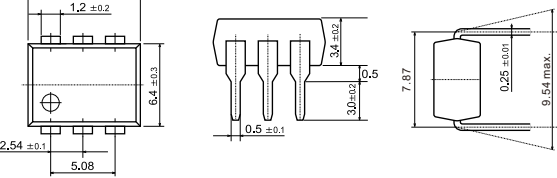
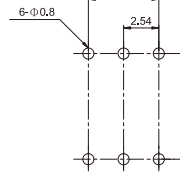
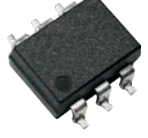
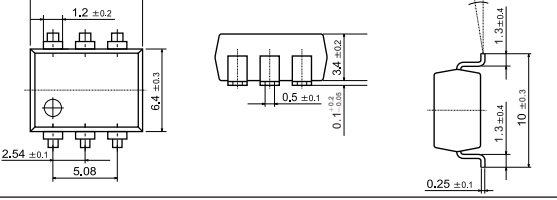
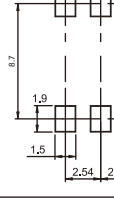

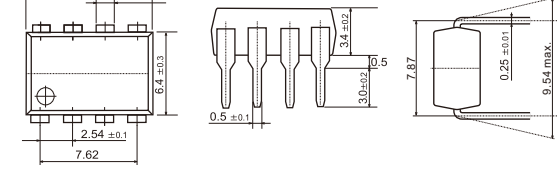
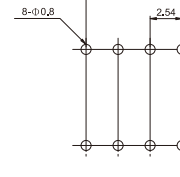

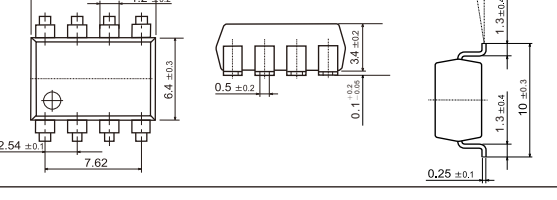
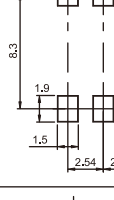

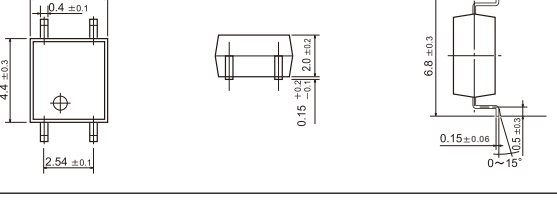
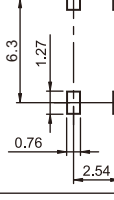
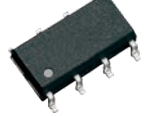
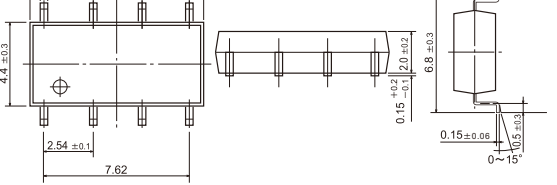
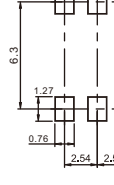


Applied voltage Vs. output capacitance characteristics



PhotoDMOS-FET Relay
Hi-Current

Package & PC Board Pattern

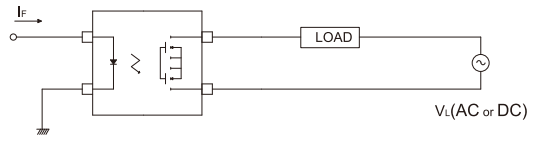
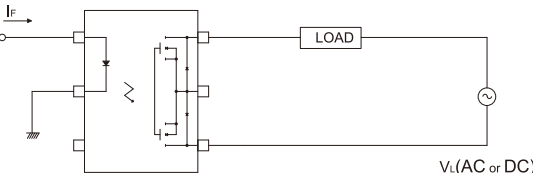
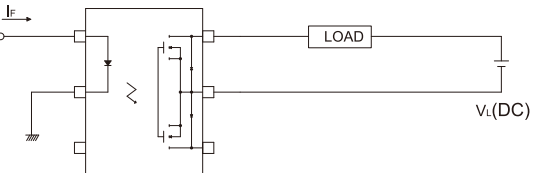
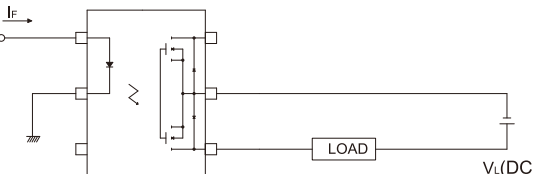
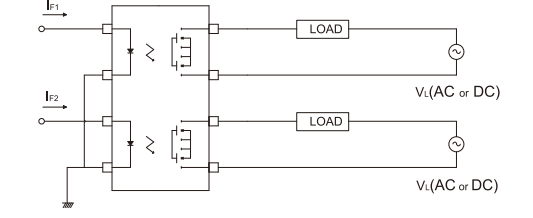
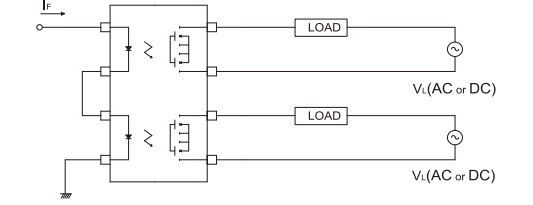
| Package 包裝 | Dimensions 外型尺寸圖 | PC Board pattern PC 板加工圖 |
|--|--|--|
|  <p>DIP4</p> |  |  <p>(Bottom View)</p> |
|  <p>SMD4</p> |  |  <p>(Top View)</p> |
|  <p>DIP6</p> |  |  <p>(Bottom View)</p> |
|  <p>SMD6</p> |  |  <p>(Top View)</p> |
|  <p>DIP8</p> |  |  <p>(Bottom View)</p> |
|  <p>SMD8</p>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

PhotoMOS-FET Relay

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 |

Load Connecting Method

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