

RF · LOW CxR=10 · 13pF · 0.8Ω · 40V

Features

- Contact Form
 - Load Voltage
 - Operation LED Current
 - Load Current
 - On-Resistance
 - Output Capacitance
 - Low Off-State Leakage Current
- 1a / 2a

40 V Max.

3.0mA Max.

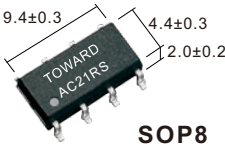
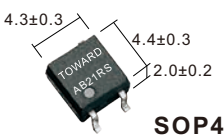
0.25A Max.

0.9Ω Typ.

13 pF Typ.

10nA Max.

Outline:(Unit:mm) pitch:2.54 mm



Terminal Identification 電路結構圖

Terminal Identification	
AB21RS	AC21RS
1: Anode (LED) 2: Cathode (LED) 3,4: Drain (MOS FET)	1,3: Anode (LED) 2,4: Cathode (LED) 5,6,7,8: Drain (MOS FET)

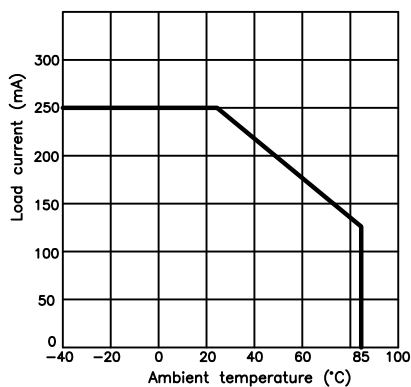
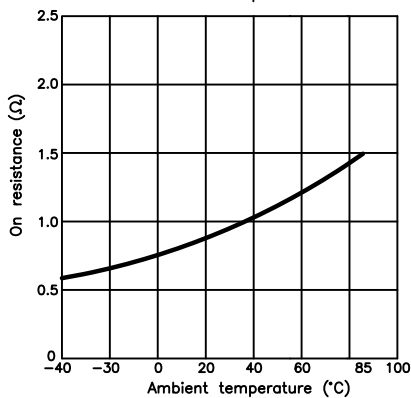
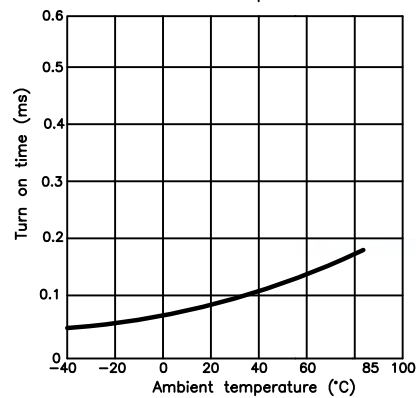
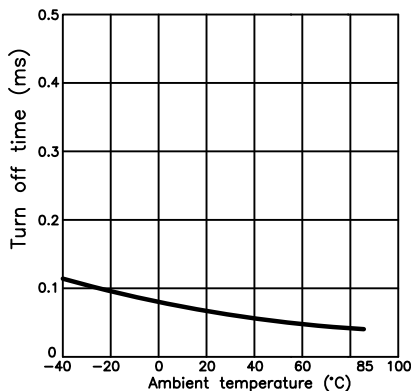
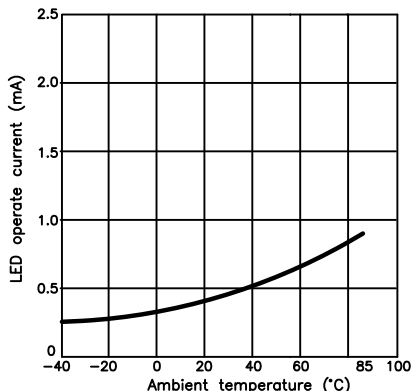
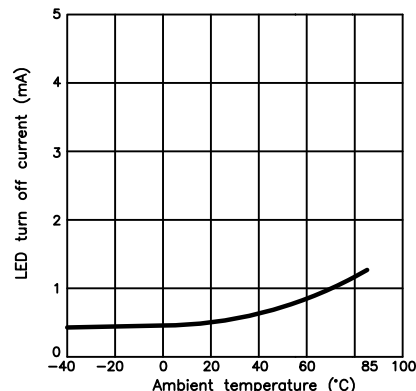
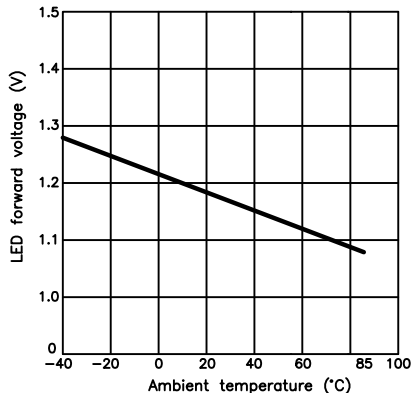
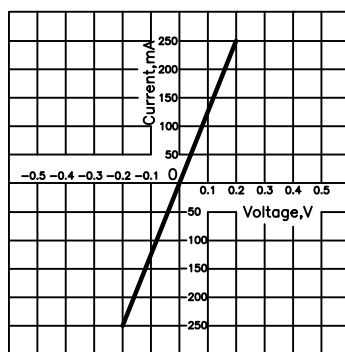
PhotoDMOS-FET Relay
RF

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

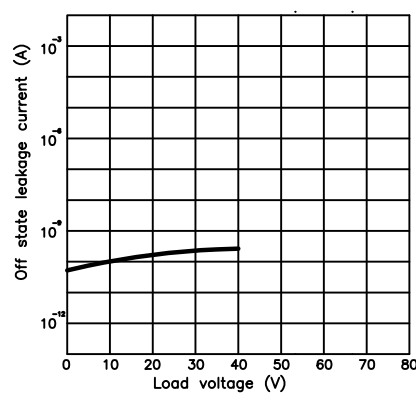
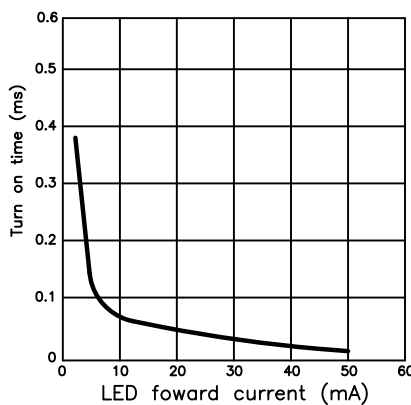
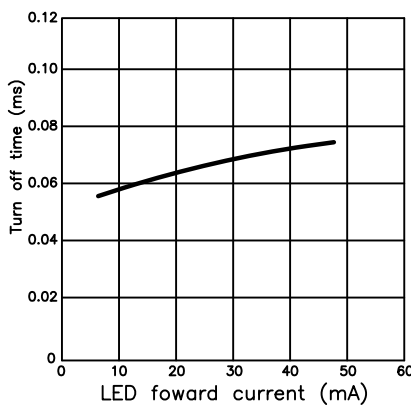
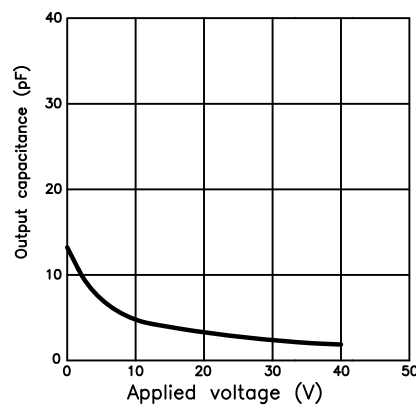
Item		Symbol	Value
Input 輸入	Continuous LED Current 連續的LED電流	I _F	50mA
	Peak LED Current LED的峰值電流 (f=100 Hz duty=1%)	I _{FP}	500mA
	LED Reverse Voltage 逆向的LED電壓	V _R	5V
	Input Power Dissipation 容許損失	P _{In}	75mW
Output 輸出	Load Voltage 負荷電壓	V _L	40V(AC peak or DC)
	Load Current 負荷電流	I _L	0.25A
	Peak Load Current 峰值負荷電流 (1 ms, 1 shot)	I _{Peak}	0.75A
	Output Power Dissipation 電流損耗	P _{Out}	300mW(1ch) 400mW(2ch)
Total Power Dissipation 全損耗		P _T	350mW(1ch) 450mW(2ch)
I/O Breakdown Voltage 入/出力間絕緣電壓		V _{I/O}	1500Vrms
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)

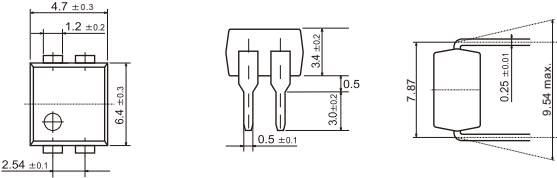
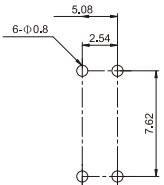
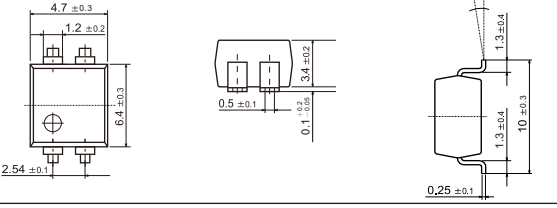
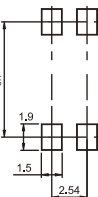
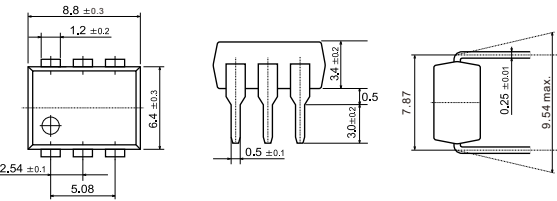
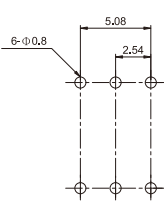
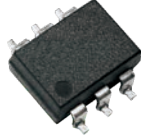
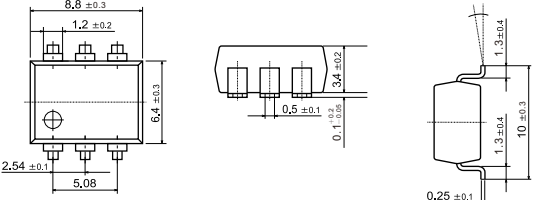
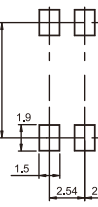
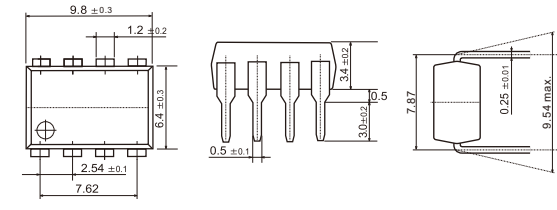
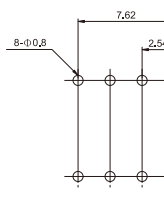
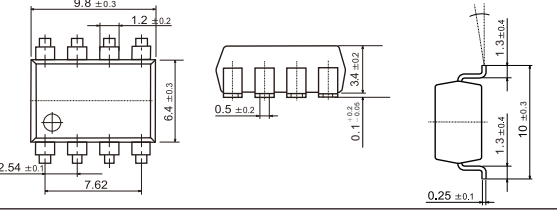
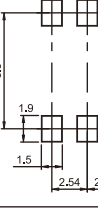
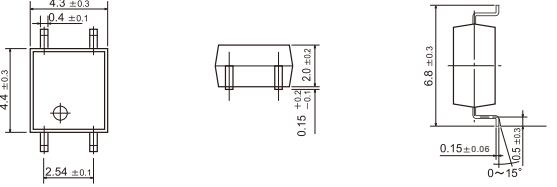
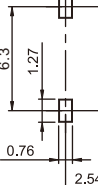
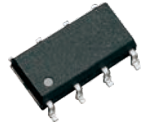
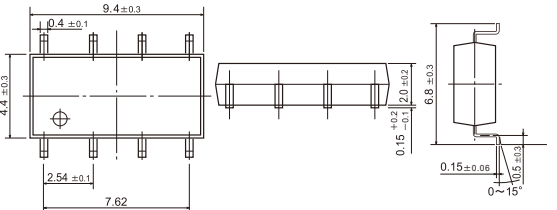
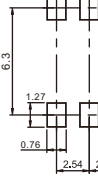
Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input 輸入	LED Forward Voltage LED順向電壓	V _F	1.0	1.17	1.5	V	I _F =10mA
	Operation LED Current LED的動作電流	I _{F On}		0.3	3.0	mA	
	Recovery LED Voltage LED的恢復電壓	V _{F Off}	0.5	1		V	
Output 輸出	On-Resistance 導通電阻 Drain to Drain	R _{On}		0.9	1.25	Ω	I _F =5mA, I _L =Rating Time to flow is within 1sec.
	Off-State Leakage Current 開路狀態時的電流	I _{Leak}		0.03	10	nA	V _L =40V
	Output Capacitance 輸出端容量	C _{Out}		13		pF	V _L =0V, f=1MHz
Transmission 傳達	Turn-On Time 動作時間	T _{On}		0.07	0.5	ms	I _F =5mA I _L =Rating
	Turn-Off Time 復位時間	T _{Off}		0.06	0.2	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}		0.8		pF	f=1MHz

Load current Vs.
Ambient temperatureOn resistance Vs.
Ambient temperatureTurn on time Vs.
Ambient temperatureTurn off time Vs.
Ambient temperatureLED operate current Vs.
Ambient temperatureLED Turn off current Vs.
Ambient temperatureLED forward voltage Vs.
Ambient temperatureVoltage Vs. current characteristics
of output at MOS portion

Off state leakage current

LED forward current Vs.
turn on time characteristicsLED forward current Vs.
turn off time characteristicsApplied voltage Vs.
output capacitance characteristics

Package & PC Board Pattern

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

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
	B DC		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
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