

**Features**

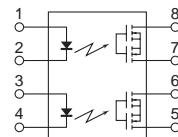
- SOP package 8 Pin type in miniature design (4.4×9.37×2.1mm/.173×.37×.083inch)
- Low driver power requirements (TTL/CMOS Compatible)
- No moving parts
- High reliability
- Arc-Free with no snubbing circuits
- 1500Vrms Input/Output isolation
- Tape & Reel version available

Applications

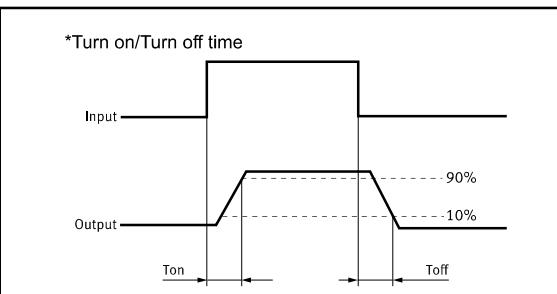
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine



SOP-8



1,3. LED Anode
2,4. LED Cathode
5,6. Drain (MOS FET)
7,8. Drain (MOS FET)

**TYPES**

Category	Output rating ^{*1}		Part No.	Packing quantity
	Load voltage	Load current		
AC/DC	400V	100mA	SOP-8	Tape and reel
			GAQW214S	1-reel: 1,000 pcs.

Absolute Maximum Ratings (Ambient Temperature: 25°C)

Item	Symbol	Value	Units	Note
Input	Continuous LED Current	I _F	50	mA
	Peak LED Current	I _{FP}	1000	mA f=100Hz, duty=1%
	LED Reverse Voltage	V _R	5	V
Output	Input Power Dissipation	P _{In}	75	mW
	Load Voltage	V _L	400	V(AC peak or DC)
	Load Current	I _L	100	mA
	Peak Load Current	I _{Peak}	0.6	A 100ms(1 pulse)
Output Power Dissipation		P _{out}	300	mW
Total Power Dissipation		P _T	350	mW
I/O Breakdown Voltage		V _{I/O}	1500	Vrms RH=60%, 1min
Operating Temperature		T _{Opr}	-40 to +85	°C
Storage Temperature		T _{Stg}	-40 to +100	°C
Pin Soldering Temperature		T _{Sol}	260	°C 10 sec max.

Electrical Specifications (Ambient Temperature: 25°C)

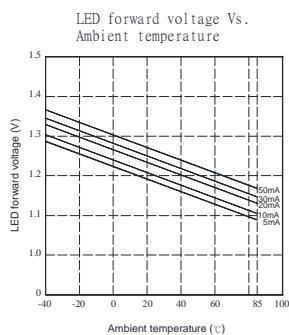
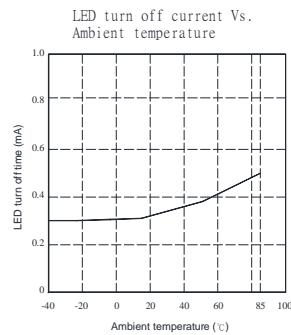
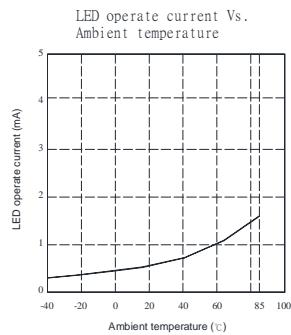
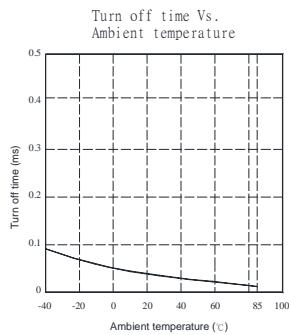
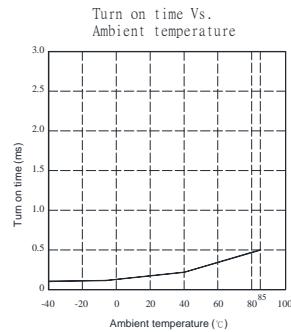
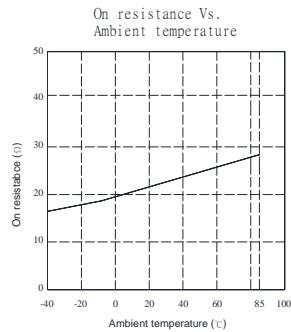
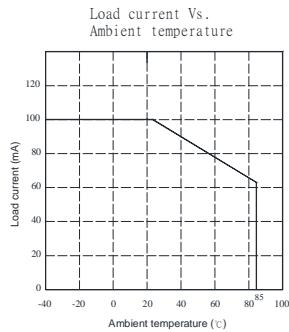
Item	Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V _F		1.2	V	I _F =10mA
	Operation LED Current	I _{F On}		0.5	mA	
	Recovery LED Current	I _{F off}		0.35	mA	
	Recovery LED Voltage	V _{F off}	0.7		V	
Output	On-Resistance	R _{on}		20	Ω	I _F =5mA, I _L =100mA, Time to flow is within 1 sec.
	Off-State Leakage Current	I _{Leak}		1	uA	V _L =Rating
	Output Capacitance	C _{out}	45		pF	V _L =0, f=1MHz
Transmission	Turn-On Time	T _{on}		0.23	ms	I _F =5mA, I _L =100mA,
	Turn-Off Time	T _{off}		0.03	ms	
Coupled	I/O Isolation Resistance	R _{I/O}	10 ¹⁰		Ω	DC500V
	I/O Capacitance	C _{I/O}		0.8	1.5	pF f=1MHz

Please obey the following conditions to ensure proper device operation and resetting. Input LED current (Recommended value): IF ≥5mA and ≤30mA.

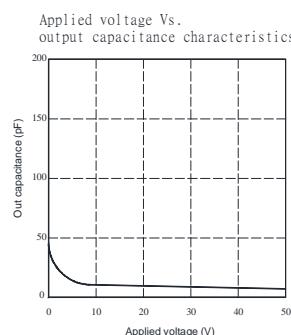
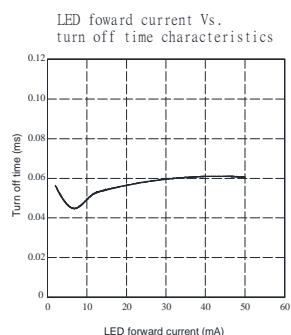
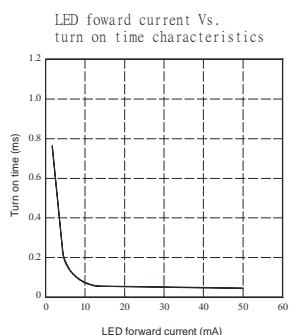
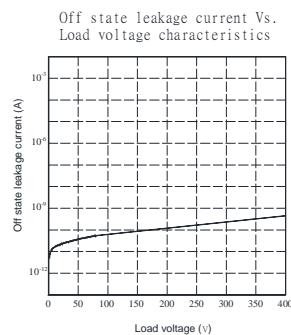
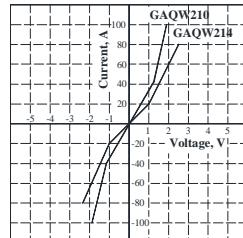
Examples of resistance value to control LED forward current (IF=5mA, INPUT VOLTAGE="E", RESISTORS="R")

"E"=3.3V, "R"=330Ω; "E"=5V, "R"=640Ω; "E"=12V, "R"=1.9KΩ; "E"=15V, "R"=2.5KΩ; "E"=24V, "R"=4.1KΩ;

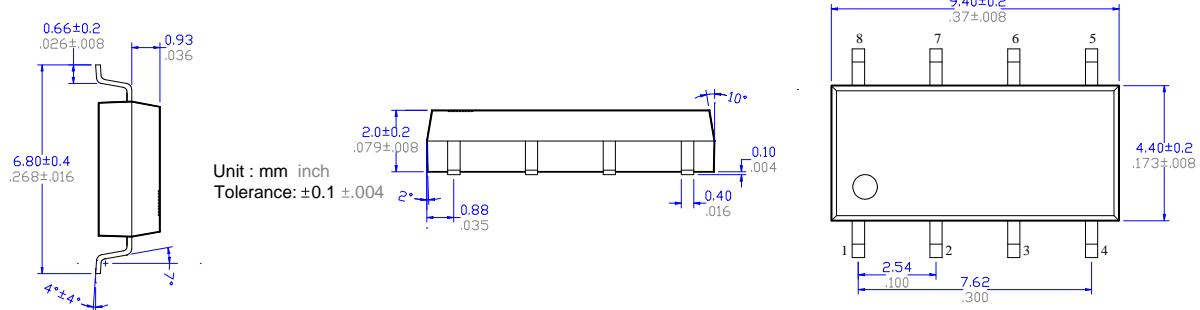
Reference Data



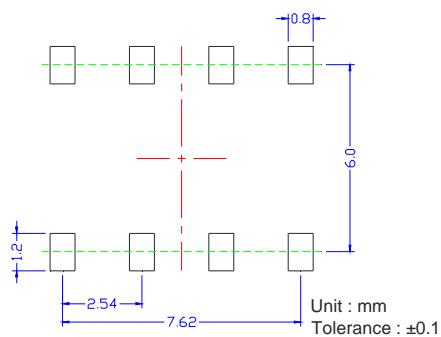
Voltage Vs. current characteristics
of output at MOS portion



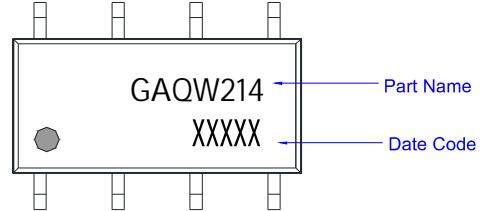
Dimensions



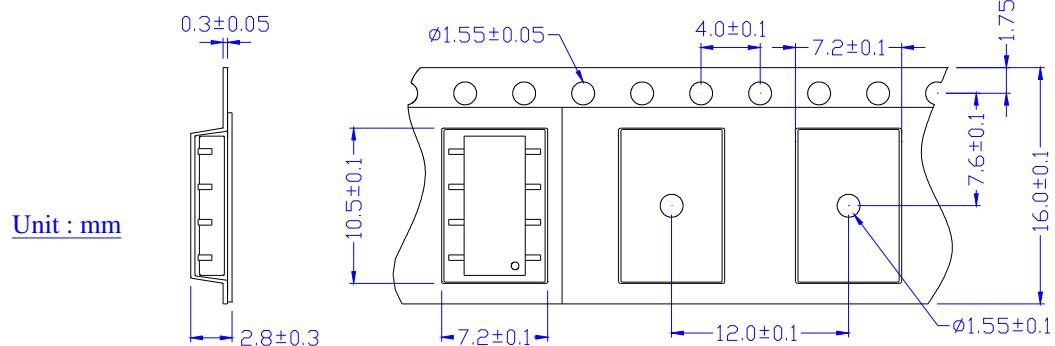
Recommended mounting pad
(TOP VIEW)



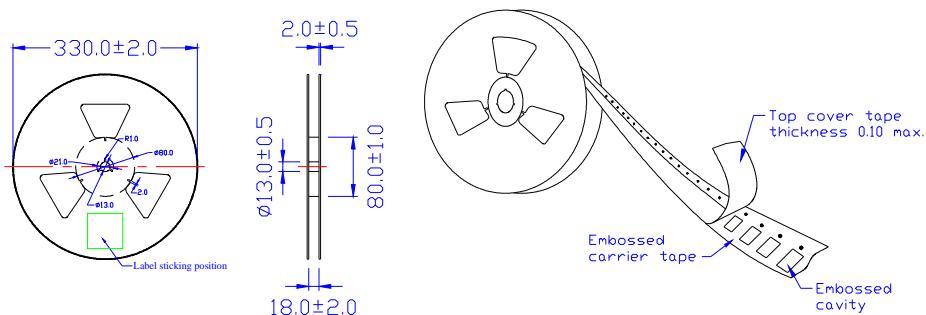
Marking



Tape dimensions



Dimensions of tape reel



单击下面可查看定价，库存，交付和生命周期等信息

[>>SUPSiC\(国晶微\)](#)