

Features

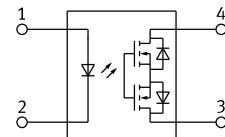
- Low-level off state leakage current of max. 1 μ A
- Low driver power requirements (TTL/CMOS Compatible)
- High reliability
- No moving parts
- 1500Vrms Input/Output isolation
- Arc-Free with no snubbing circuits
- SOP package 4 Pin type in miniature design (4.4×4.3×2.1mm /.173×.169×.083inch)
- The optically coupled input is controlled by a highly efficient GaAlAs infrared LED and MOS FETs on the output side.

Applications

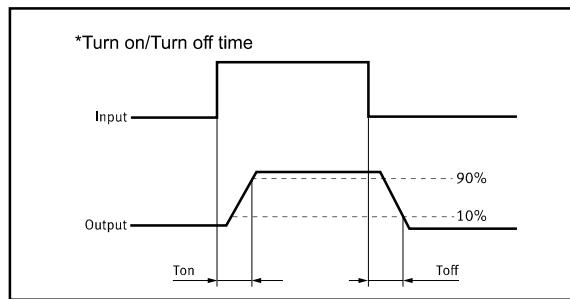
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine



SOP-4



1. LED Anode
2. LED Cathode
- 3, 4. Drain (MOS FET)

**TYPES**

Category	Output rating ^{*1}		Part No.	Packing quantity
	Load voltage	Load current		
AC/DC	60 V	1.0 A	SOP-4 GAQY212GSX	Tape and reel 1-reel: 2,000 pcs.

Absolute Maximum Ratings (Ambient Temperature: 25°C)

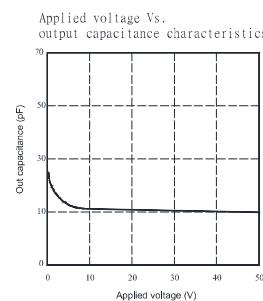
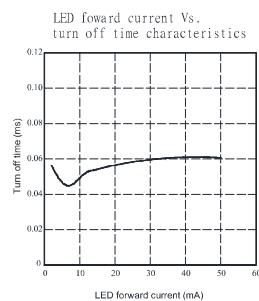
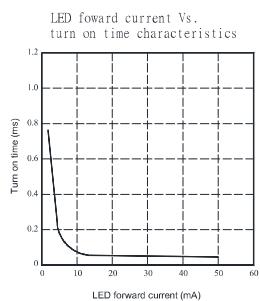
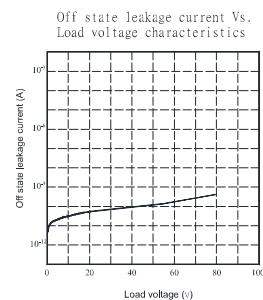
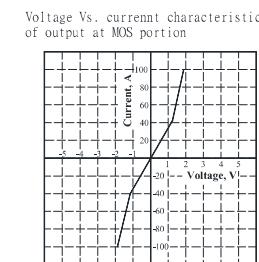
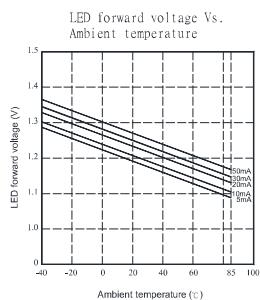
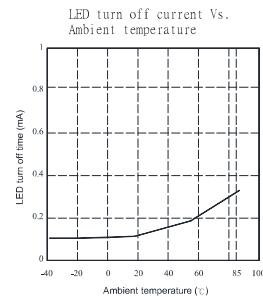
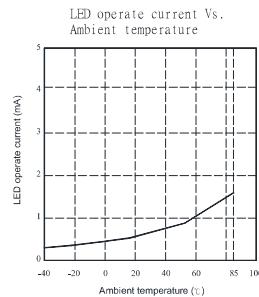
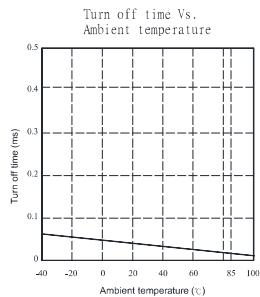
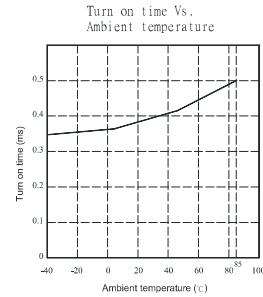
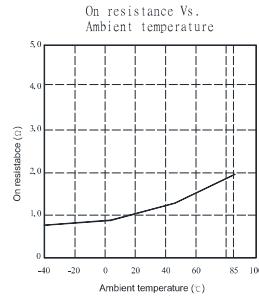
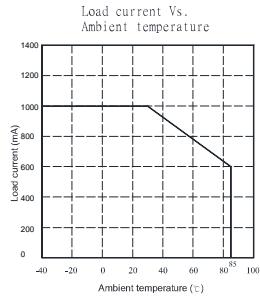
Item	Symbol	Value	Units	Note
Input	Continuous LED Current	I _F	50	mA
	Peak LED Current	I _{FP}	1000	mA
	LED Reverse Voltage	V _R	5	V
	Input Power Dissipation	P _{In}	75	mW
Output	Load Voltage	V _L	60	V(AC peak or DC)
	Load Current	I _L	1000	mA
	Peak Load Current	I _{Peak}	2.0	A
	Output Power Dissipation	P _{out}	450	mW
Total Power Dissipation	P _T	500	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	1.16	1.32	1.46	V
	Operation LED Current	I _{Fon}		0.8	2.0	mA
	Recovery LED Current	I _{off}		0.35	0.5	mA
	Recovery LED Voltage	V _{Foff}	0.7			V
Output	On-Resistance	R _{on}		0.18	0.35	Ω
	Off-State Leakage Current	I _{Leak}		1.0	uA	V _L =Rating
	Output Capacitance	C _{out}		68	pF	V _L =0, f=1MHz
Transmission	Turn-On Time	T _{on}		0.35	0.5	ms
	Turn-Off Time	T _{off}		0.1	0.3	ms
Coupled	I/O Isolation Resistance	R _{I/O}	10 ¹⁰		Ω	DC500V
	I/O Capacitance	C _{I/O}		0.8	1.5	pF

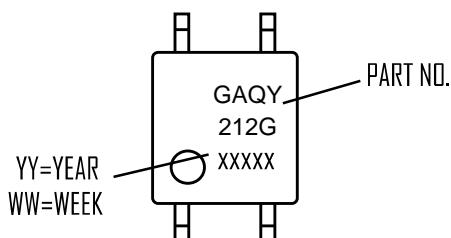
Please obey the following conditions to ensure proper device operation and resetting. Input LED current (Recommended value): IF ≥5mA and ≤30mA.
 Examples of resistance value to control LED forward current (IF=5mA, INPUT VOLTAGE="E", RESISTORS="R")
 "E"=3.3V, "R"=330Ω; "E"=5V, "R"=640Ω; "E"=12V, "R"=1.9KΩ; "E"=15V, "R"=2.5KΩ; "E"=24V, "R"=4.1KΩ;

Reference Data

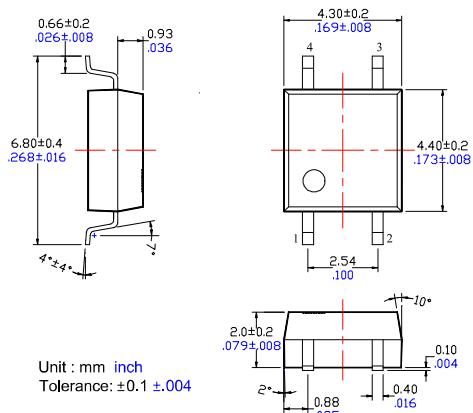


Dimensions

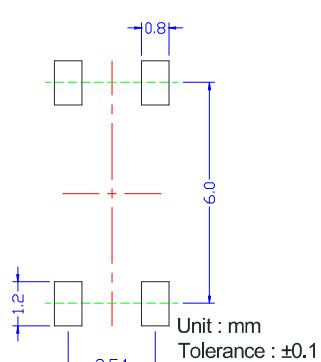
4-SOP



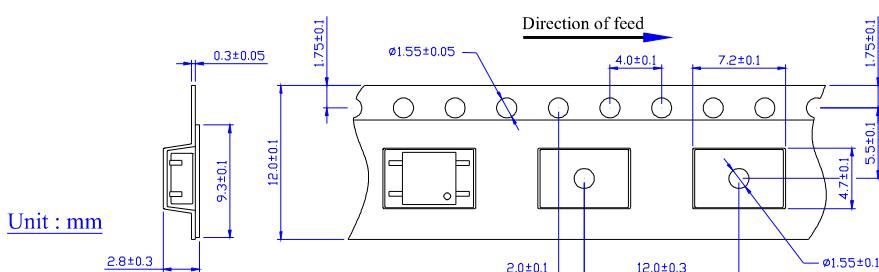
Surface mount terminal type



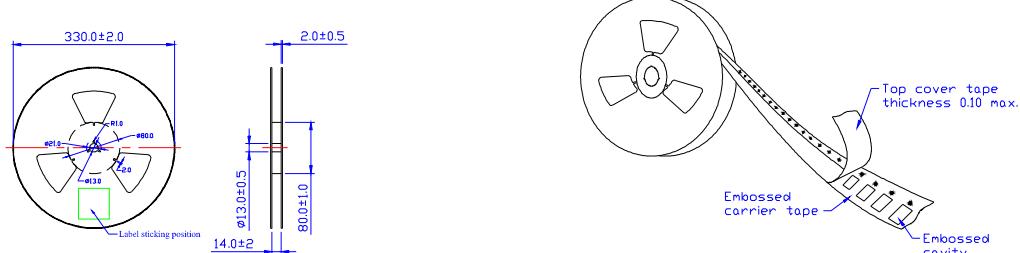
Recommended mounting pad (Top view)



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\(国晶微\)](#)