

**Features**

- Low driver power requirements (TTL/CMOS Compatible)
- No moving parts
- High reliability
- Arc-Free with no snubbing circuits
- 3750Vrms Input/Output isolation

Applications

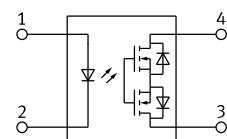
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine

Outline Dimensions

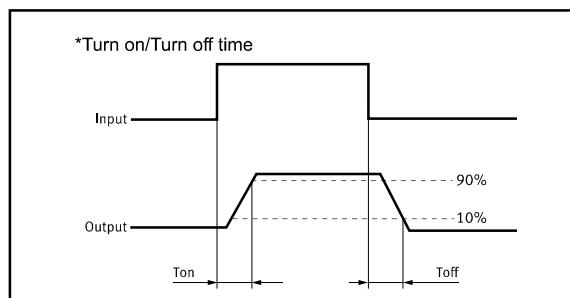
DIP4



SMD4



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

**TYPES**

Category	Output rating		Package	Part No.	Packing quantity
	Load voltage	Load current			
AC/DC	60V	1.10A	DIP4	GAQY212G1E	50pcs/tube
			SMD4	GAQY212G1EH	1000pcs/1reel

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	
	Input Power Dissipation	P _{In}	75	mW	
Output	Load Voltage	V _L	60	V(AC peak or DC)	
	Load Current	I _L	1.1	A	
	Peak Load Current	I _{Peak}	4.0	A	100ms(1 pulse)
	Output Power Dissipation	P _{out}	380	mW	
Total Power Dissipation		P _T	450	mW	
I/O Breakdown Voltage		V _{I/O}	3750	Vrm	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)

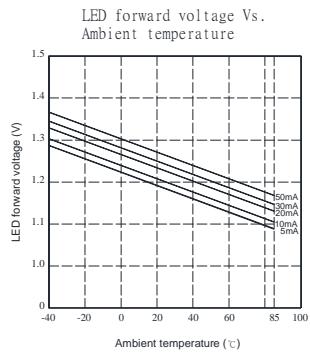
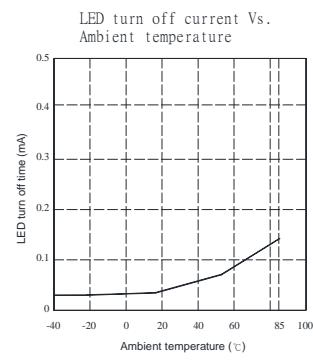
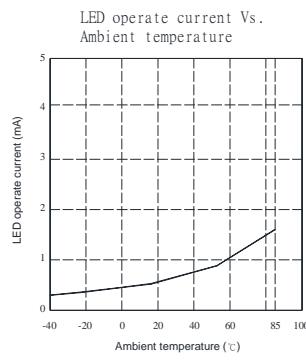
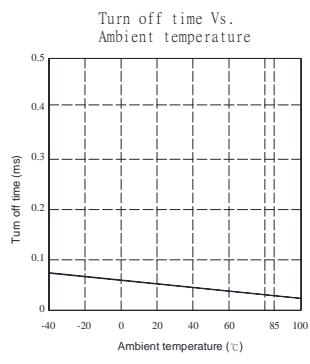
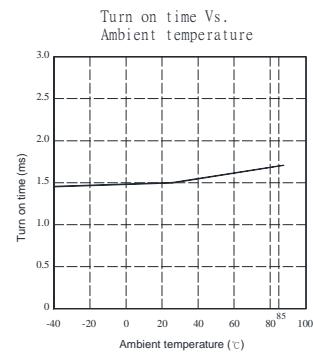
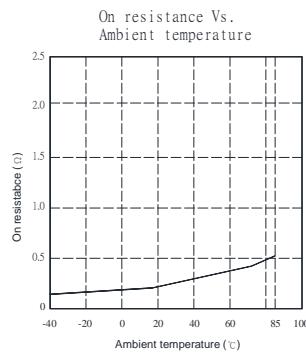
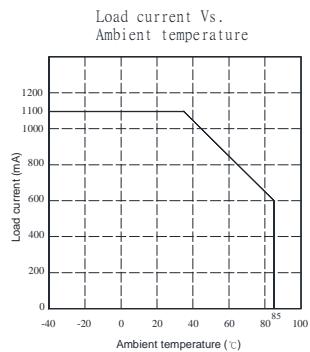
Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V _F		1.2	1.4	V	I _F =10mA
	Operation LED Current	I _{F on}		0.5	5.0	mA	
	Recovery LED Current	I _{F off}		0.35	0.5	mA	
	Recovery LED Voltage	V _{F off}	0.7			V	
Output	On-Resistance	R _{on}		0.27	0.7	Ω	I _F =10mA, I _L =1Amp Within 10ms on time
	Off-State Leakage Current	I _{Leak}			1	uA	I _F =0mA, V _L =50V
	Output Capacitance	C _{out}		115		pF	f=1MHz
Transmission	Turn-On Time	T _{on}		1.5	5	ms	I _F =5mA, I _L =100mA
	Turn-Off Time	T _{off}		0.05	2	ms	
Coupled	I/O Isolation Resistance	R _{I/O}	5			GΩ	DC=500V
	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.

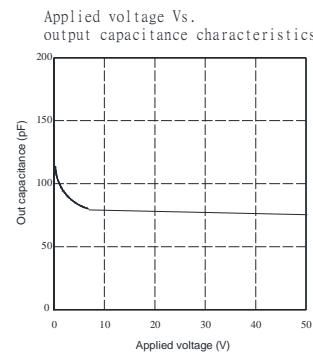
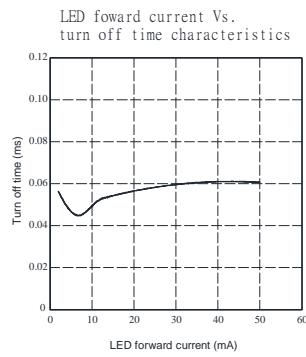
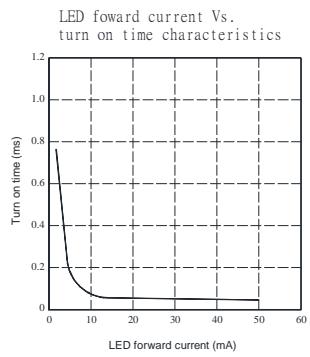
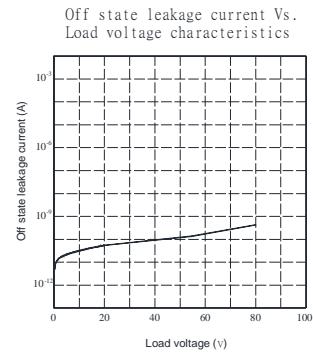
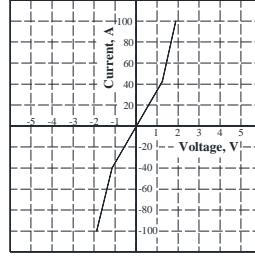
Examples of resistance value to control LED forward current (IF=5mA, INPUT VOLTAGE="E", RESISTORS="R")

"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



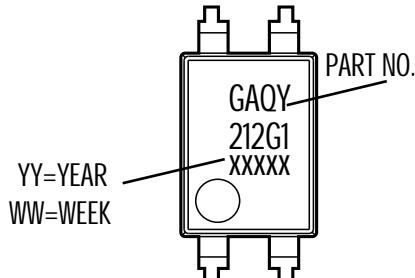
Dimensions

4-SMD

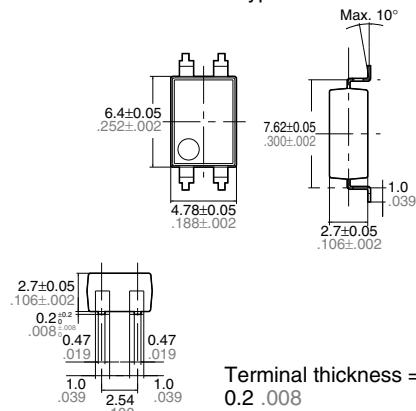


Dimensions

mm inch

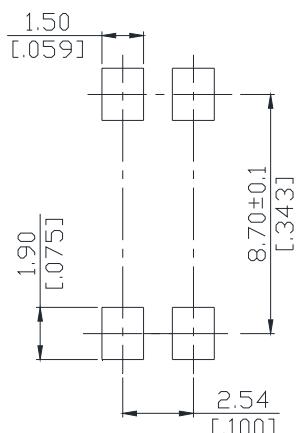


Surface mount terminal type



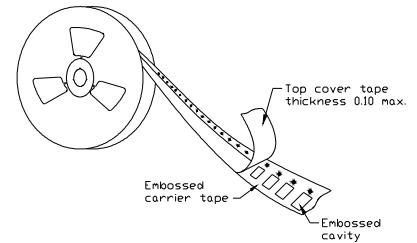
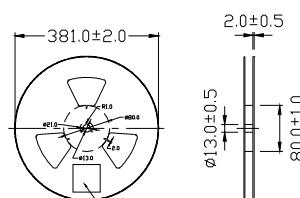
Terminal thickness =
0.2 .008
General tolerance: ±0.1 ±.004

PC board pattern (Top view)

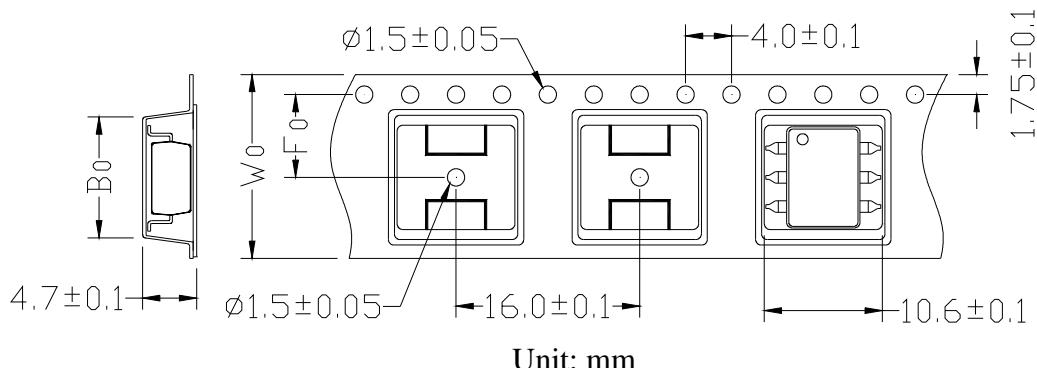


Unit : mm [inch]
Tolerance : ±0.1

Tape dimensions



Dimensions of tape reel

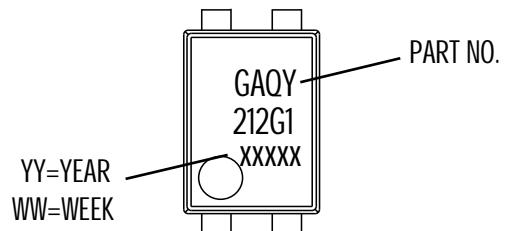


Unit: mm

TYPE	B0±0.1	F0±0.1	W0±0.1	13"REEL/PCS
4P	5.3	7.5	16	1000

Dimensions

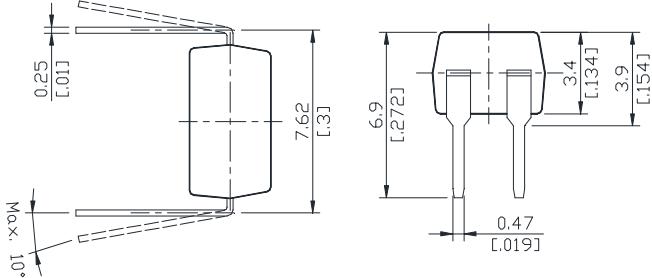
4-DIP



mm inch

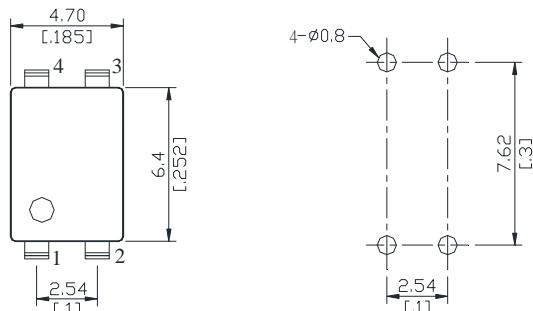
Dimensions

Through hole terminal type



PC board pattern

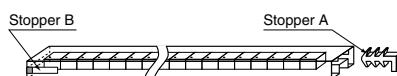
(TOP VIEW)



Unit : mm inch
Tolerance: +0.2 -.007

DIP type

Devices are packaged in a tube so that pin No. 1 is on the stopper B side. Observe correct orientation when mounting them on PC boards.



单击下面可查看定价，库存，交付和生命周期等信息

[>>SUPSiC\(国晶微\)](#)