

**Features**

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

Applications

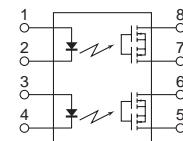
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine

Outline Dimensions

SMD-8



DIP-8



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

TYPES

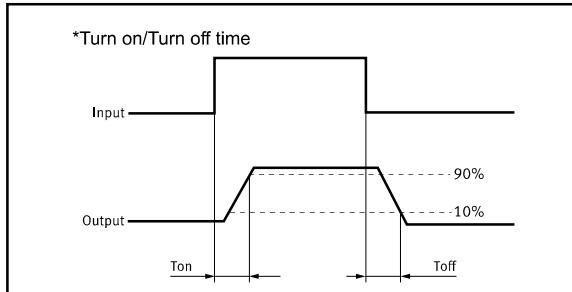
Category	Output rating		Package	Part No.	Packing quantity
	Load voltage	Load current			
AC/DC	60V	2A	DIP8	GAQW212G2E	50pcs/tube
			SMD8	GAQW212G2EH	1000pcs/1reel

Absolute Maximum Ratings (Ambient Temperature: 25 °C)

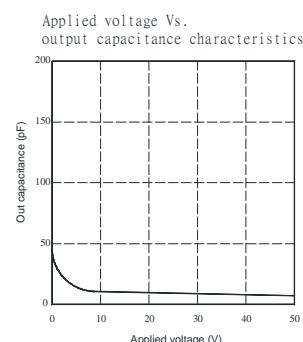
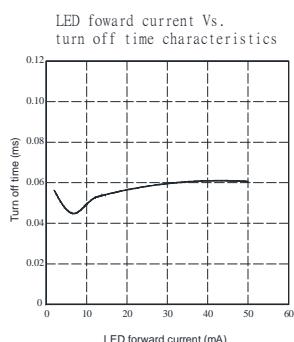
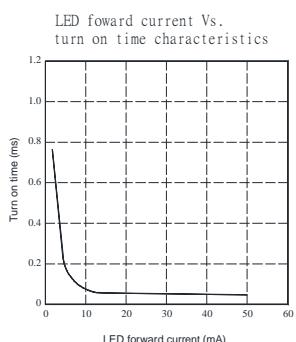
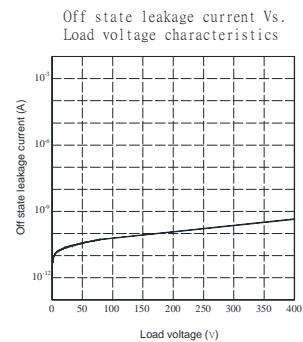
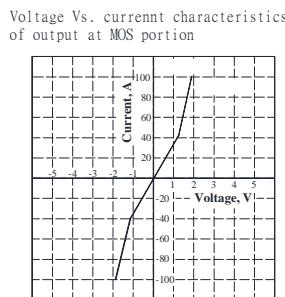
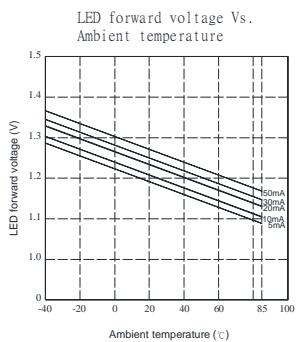
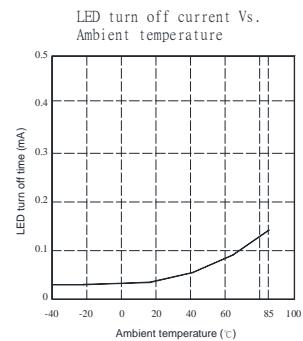
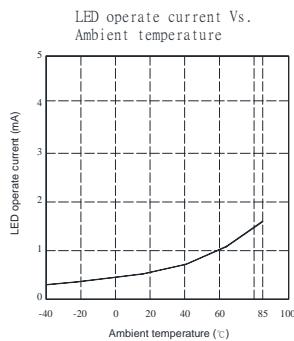
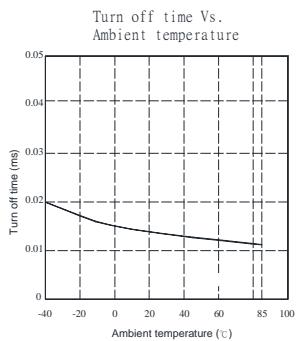
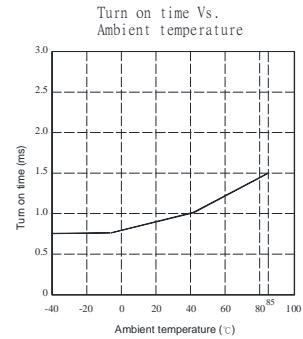
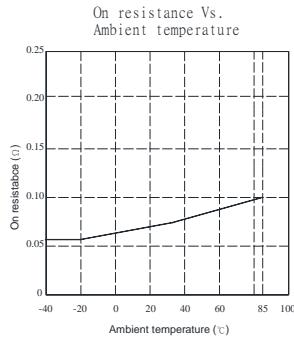
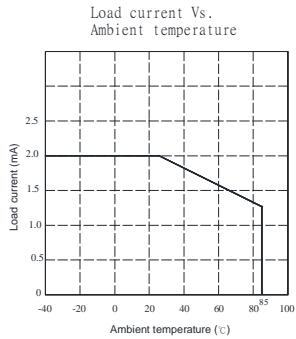
Item	Symbol	Value	Units	Note
Input	Continuous LED Current	I _F	50	mA
	Peak LED Current	I _{FP}	1000	mA
	LED Reverse Voltage	V _R	5	V
	Input Power Dissipation	P _{in}	75	mW
Output	Load Voltage	V _L	60	V(AC peak or DC)
	Load Current	I _L	2.0	A
	Peak Load Current	I _{Peak}	6.0	A
	Output Power Dissipation	P _{out}	500	mW
Total Power Dissipation	P _T	650	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	1.32	1.6	V	I _F =10mA
	Operation LED Current	I _{F on}		1.0	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}		0.069	0.085	Ω	I _F =5mA, I _L =2Amp Within 1s on time
	Off-State Leakage Current	I _{Leak}			0.01	uA	I _F =0mA, V _L =50V
	Output Capacitance	C _{out}		115		pF	f=1MHz
Transmission	Turn-On Time	T _{on}	1.0	2.7	3.2	ms	I _F =5mA, I _L =2A
	Turn-Off Time	T _{off}	0.04	0.05	0.1	ms	
Coupled	I/O Isolation Resistance	R _{io}	5			GΩ	DC=500V
	I/O Capacitance	C _{io}		0.8	1.5	pF	f=1MHz

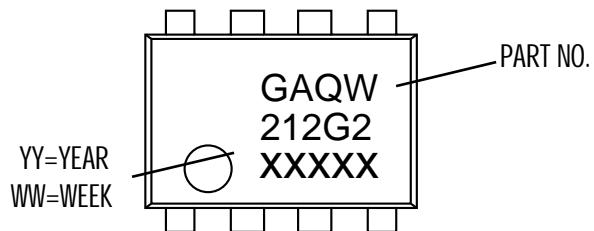


Reference Data

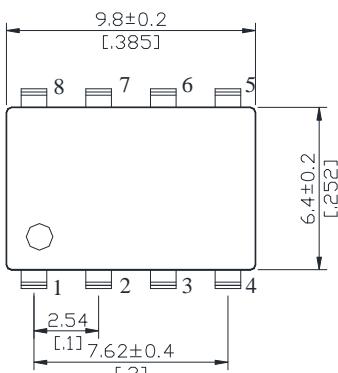
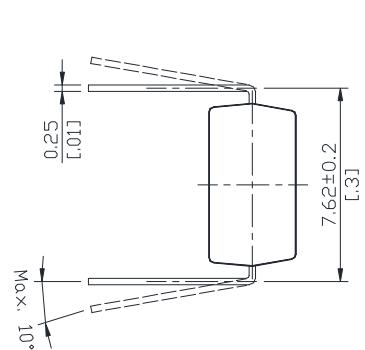


8-DIP

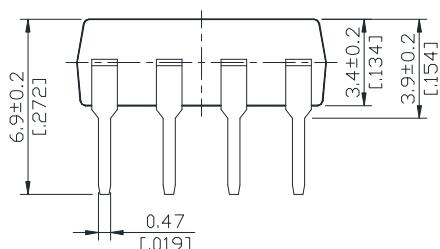
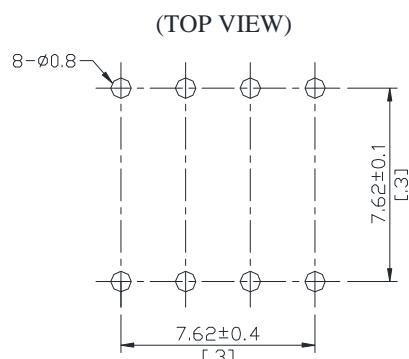
Dimensions



Through hole terminal type



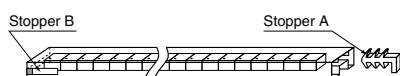
PC board pattern



Unit : mm inch
Tolerance: +0.2 -.007

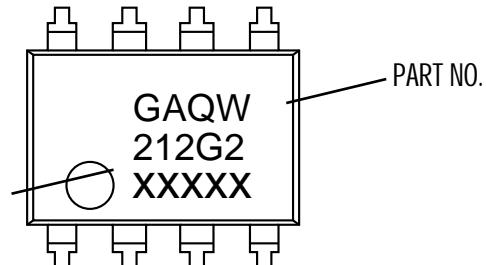
DIP type

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.

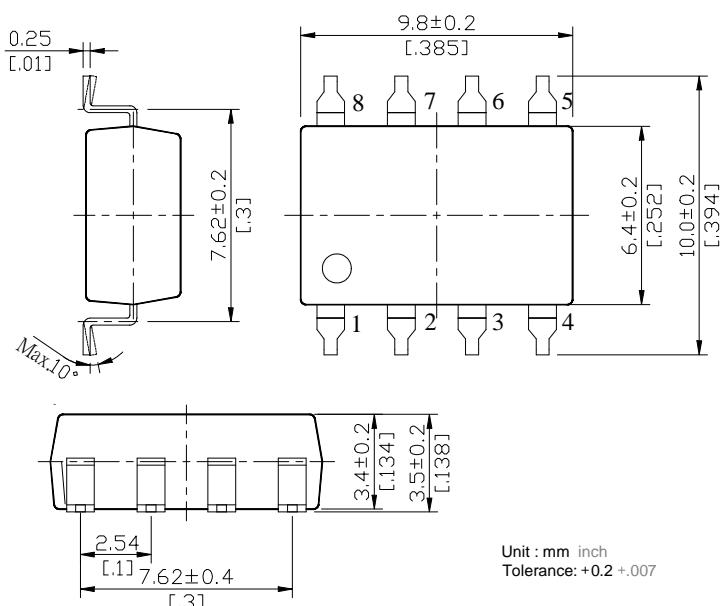


8-SMD

Dimensions

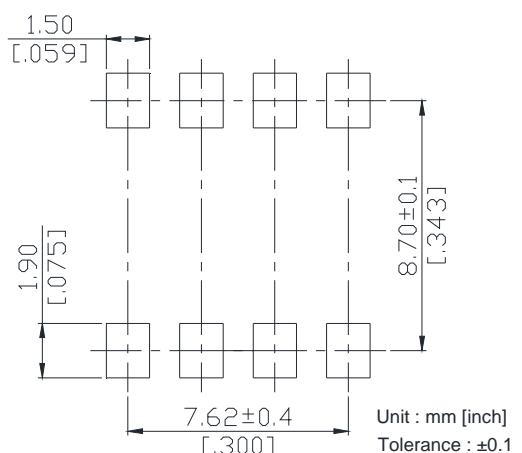


Surface mount terminal type



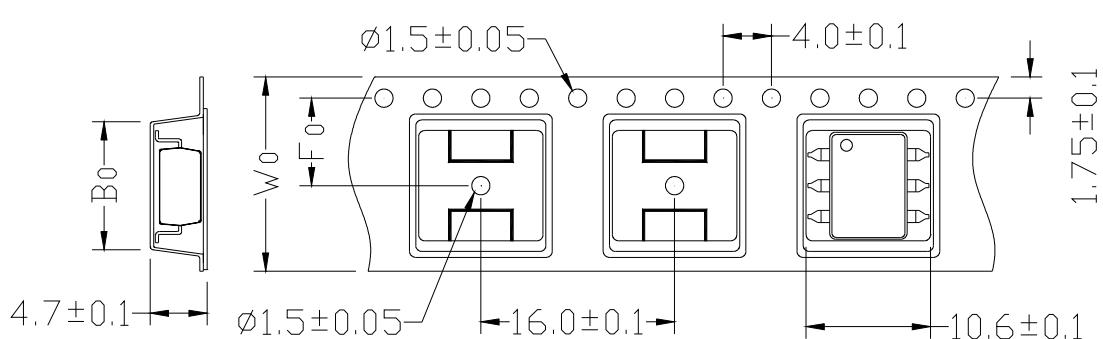
PC board pattern

(Top view)



Tape dimensions

Direction of feed



Dimensions of tape reel

