



### Features

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

### Applications

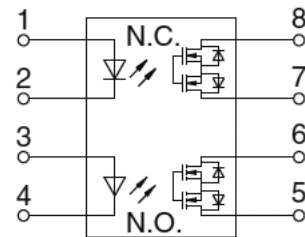
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine



SMD8

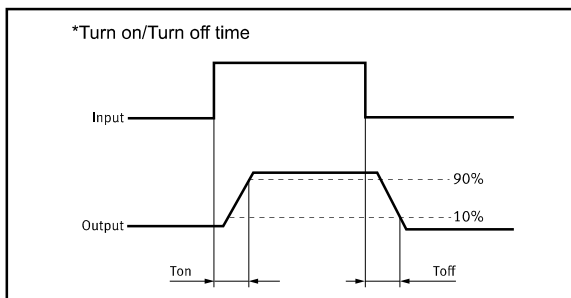


DIP8

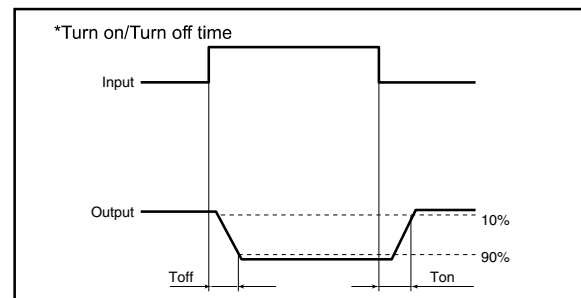


1,3.LED Anode  
 2,4.LED Cathode  
 5,6.Drain (MOSFET)1a  
 7,8.Drain (MOSFET)1b

### Normally-On



### Normally-Off



### TYPES

Category	Output rating		Package	Part No.	Packing quantity
	Load voltage	Load current			
AC/DC	60V	0.4A	DIP8	GAQW612E	50pcs/tube
			SMD8	GAQW612EH	1000pcs/reel

#### Absolute Maximum Ratings (Ambient Temperature: 25 °C)

Item		Symbol	Value	Units	Note
Input	Continuous LED Current	IF	50	mA	
	Peak LED Current	IFP	1000	mA	f=100Hz, duty=1%
	LED Reverse Voltage	VR	5	V	
	Input Power Dissipation	Pin	75	mW	
Output	Load Voltage	VL	60	V(AC peak or DC)	
	Load Current	IL	400	mA	
	Peak Load Current	IPeak	700	mA	1ms(1 pulse)
	Output Power Dissipation	Pout	450	mW	
Total Power Dissipation		PT	500	mW	
I/O Breakdown Voltage		VI/O	3750	Vrms	RH=60%, 1min
Operating Temperature		TOpr	-40 to +85	-40 to +85	
Storage Temperature		TStg	-40 to +100	-40 to +100	
Pin Soldering Temperature		TSol	260	260	10 sec max.

#### Electrical Specifications (Ambient Temperature: 25 °C)

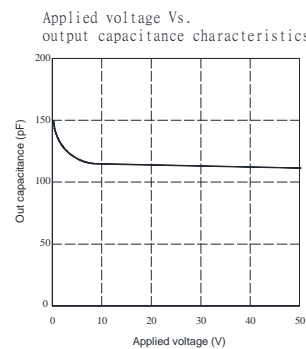
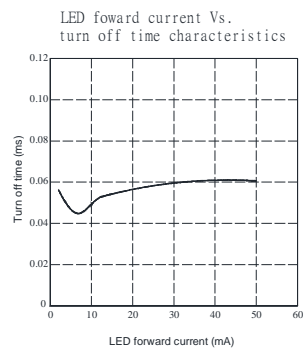
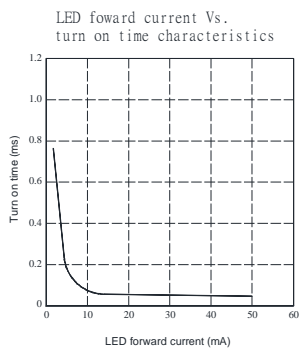
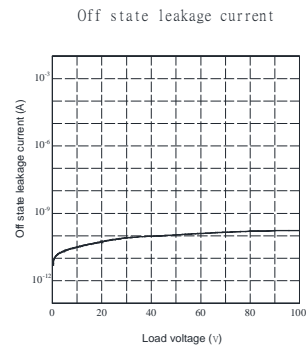
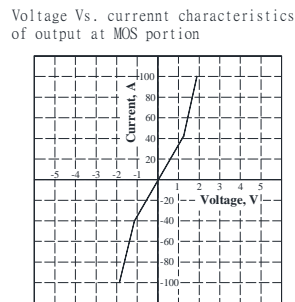
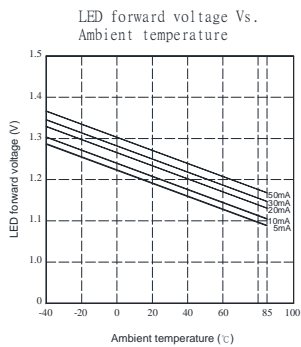
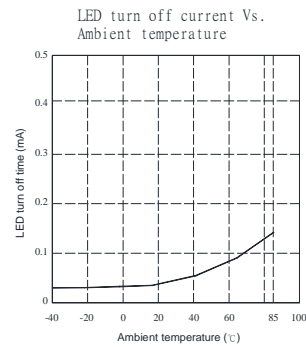
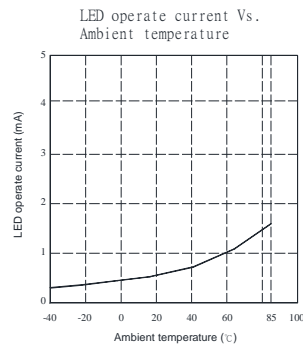
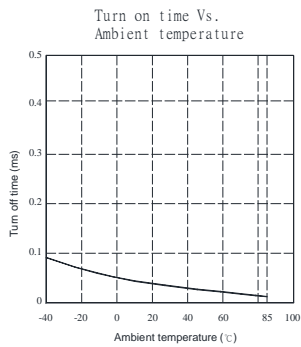
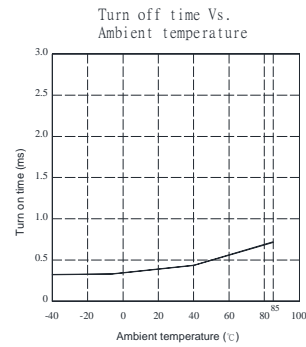
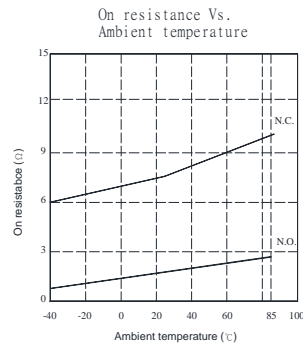
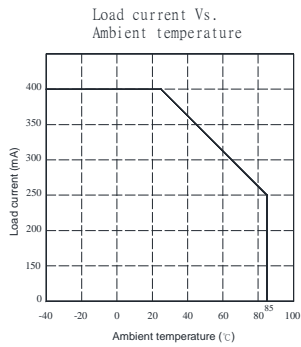
Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	VF		1.2	1.4	V	IF=10mA
	Operation LED Current	IF On		0.5	5.0	mA	
	Recovery LED Current	IF Off		0.35	0.5	mA	
	Recovery LED Voltage	VF Off	0.5			V	
Output	On-Resistance	ROn		1(N.O.)	1.4(N.O.)	Ω	IF=5mA (N.O.) IF=0mA (N.C) IL=100mA Time to flow is within 1 sec.
				6(N.C.)	10(N.C.)		
	Off-State Leakage Current	ILeak		1	10	uA	IF=0mA (N.O.) IF=5mA (N.C) VL= Rating
	Output Capacitance	COut		150		pF	IF=5mA,VL=0, f=1MHz
Transmission	Turn-On Time	TOn		0.23(N.O.)	0.5(N.O.)	ms	IF=5mA, IL=50mA
				0.2(N.C.)	1.0(N.C.)		
	Turn-Off Time	TOff		0.03(N.O.)	0.2(N.O.)	ms	
				0.5(N.C.)	3.0(N.C.)		
Coupled	I/O Isolation Resistance	RI/O	10 <sup>10</sup>			Ω	DC500V
	I/O Capacitance	CI/O		0.8		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;

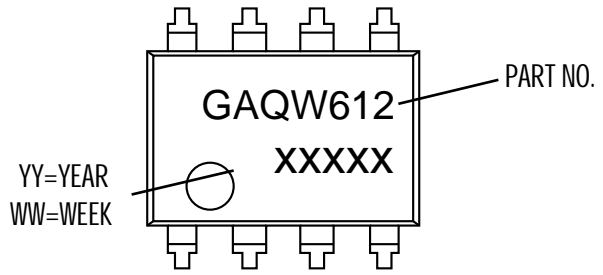
### Reference Data



## 8-SMD

## Dimensions

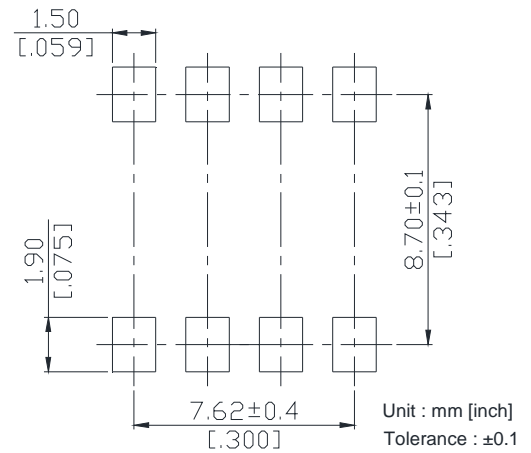
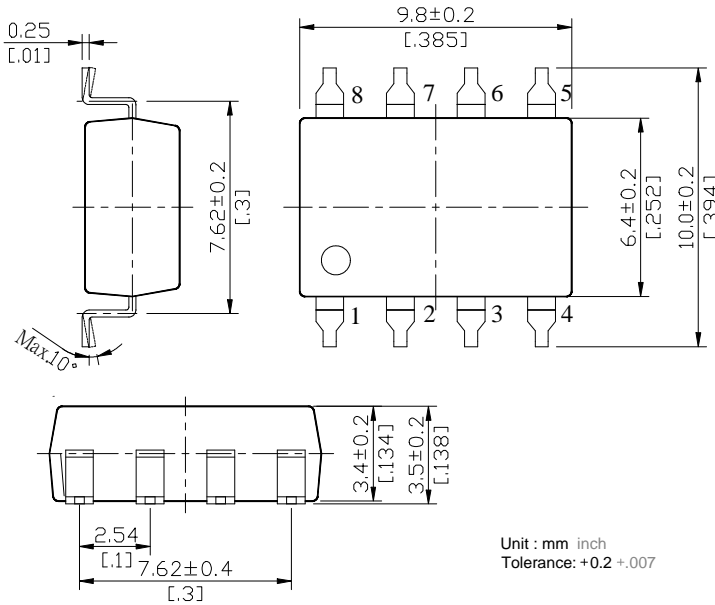
mm inch



Surface mount terminal type

PC board pattern

(Top view)

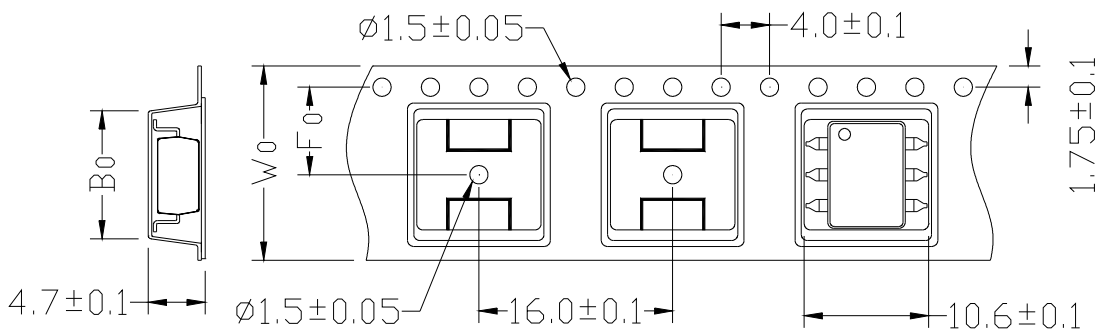


Unit : mm inch  
Tolerance : +0.2 +.007

Unit : mm [inch]  
Tolerance : ±0.1

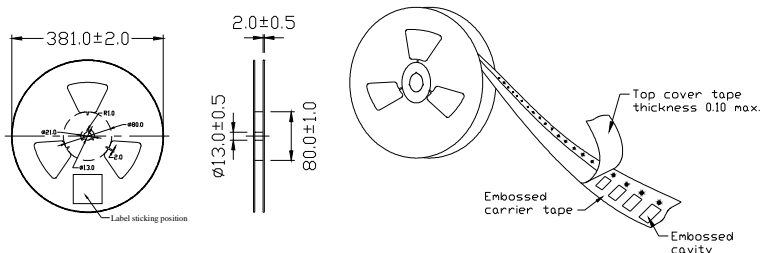
Tape dimensions

Direction of feed



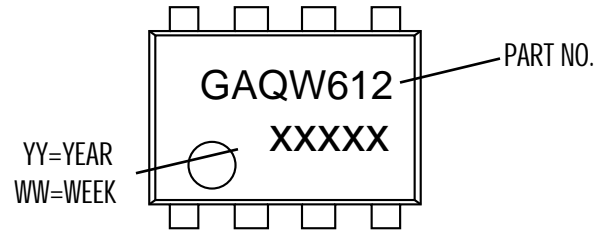
Unit: mm

Dimensions of tape reel

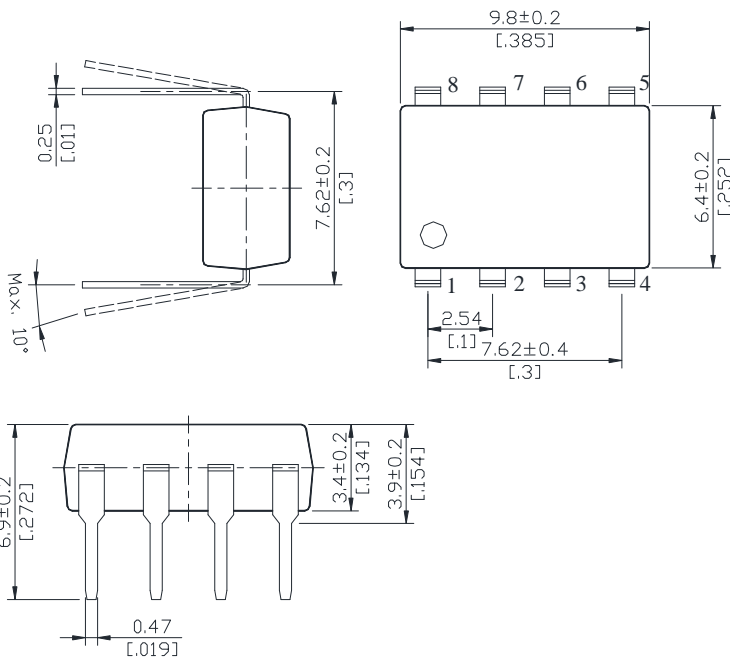


## 8-DIP

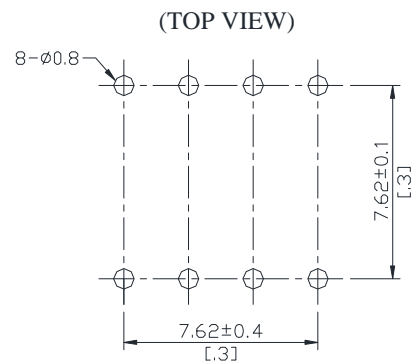
## Dimensions



### Through hole terminal type



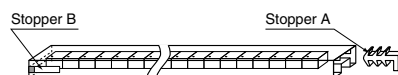
### PC board pattern



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.



单击下面可查看定价，库存，交付和生命周期等信息

[>>SUPSiC\(国晶微\)](#)