

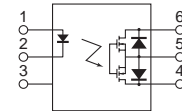


## Features

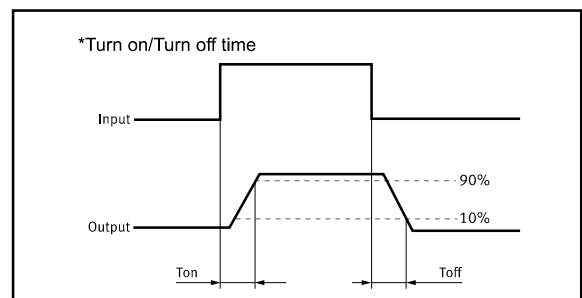
- Low driver power requirements (TTL/CMOS Compatible)
- No moving parts
- High reliability
- Arc-Free with no snubbing circuits
- 3750Vrms Input/Output isolation

## Applications

- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine Arc-Free with no snubbing circuits



1. LED Anode
2. LED Cathode
4. Drain (MOS FET)
5. Source (MOS FET)
6. Drain (MOS FET)



## TYPES

Category	Output rating		Package	Part No.	Packing quantity
	Load voltage	Load current			
AC/DC	350V	120mA	DIP6	GAQV210E	50pcs/tube
			SMD6	GAQV210EH	1000pcs/reel

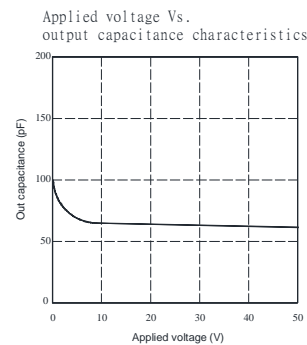
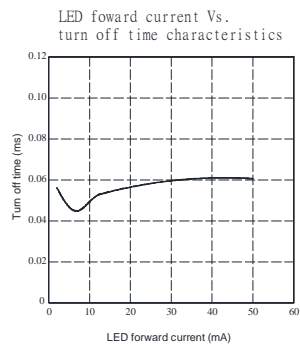
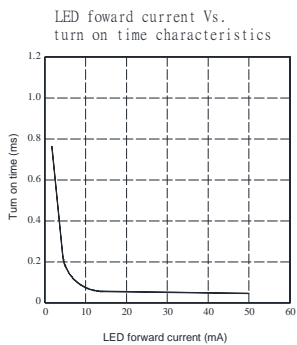
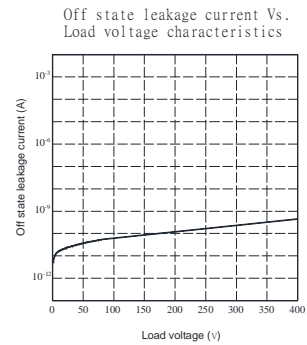
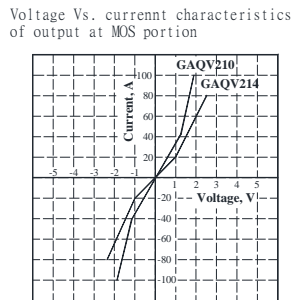
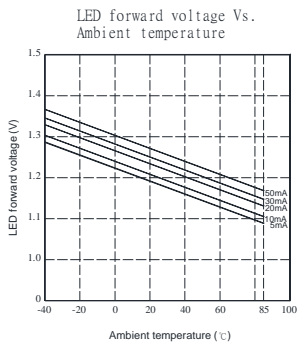
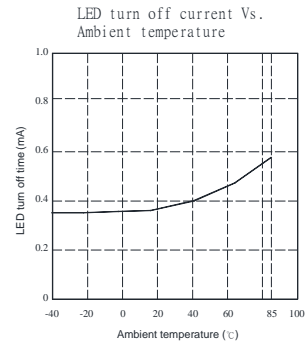
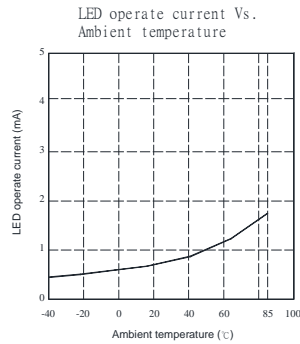
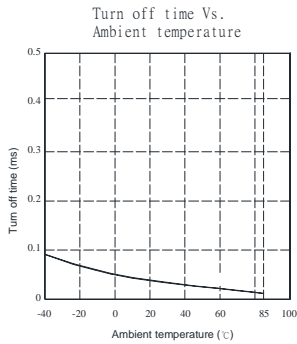
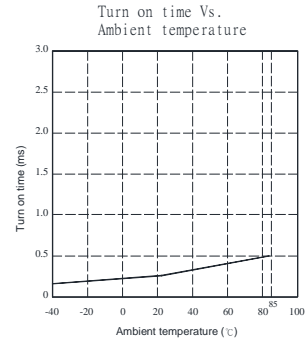
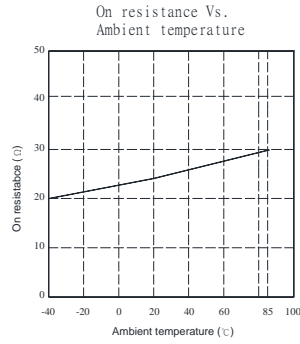
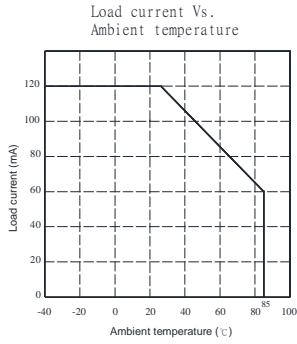
Absolute Maximum Ratings (Ambient Temperature: 25 °C)

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	$V_L$	350	V(AC peak or DC)	
	Load Current	$I_L$	120	mA	
	Peak Load Current	$I_{Peak}$	0.6	mA	100ms(1 pulse)
	Output Power Dissipation	$P_{out}$	300	mW	
Total Power Dissipation		$P_T$	350	mW	
I/O Breakdown Voltage		$V_{I/O}$	3750	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	1.4	V	$I_F=10mA$
	Operation LED Current	$I_{F on}$		0.5	3.0	mA	
	Recovery LED Current	$I_{F off}$		0.35	0.5	mA	
	Recovery LED Voltage	$V_{F off}$	0.5			V	
Output	On-Resistance	$R_{on}$		20	30	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	$C_{out}$		110		pF	$V_L=0, f=1MHz$
Transmis sion	Turn-On Time	$T_{on}$		0.23	0.5	ms	$I_F=5mA, I_L=100mA$ ,
	Turn-Off Time	$T_{off}$		0.05	0.2	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

## Reference Data

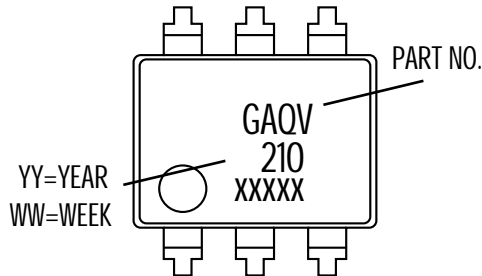


## Dimensions

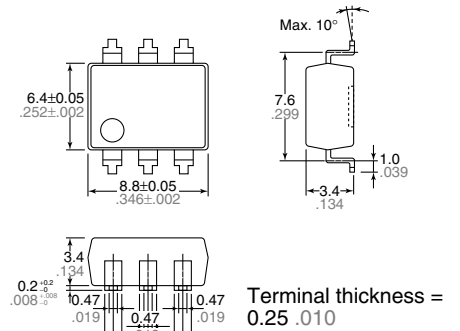
### 6-SMD



Dimensions  
mm inch

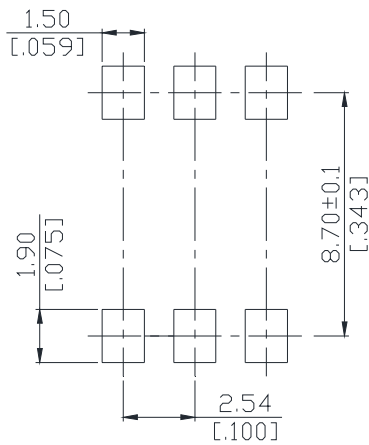


### Surface mount terminal type



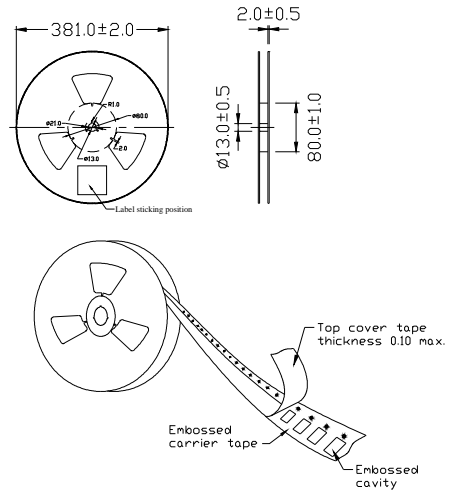
General tolerance:  $\pm 0.1 \pm .004$

### PC board pattern (Top view)

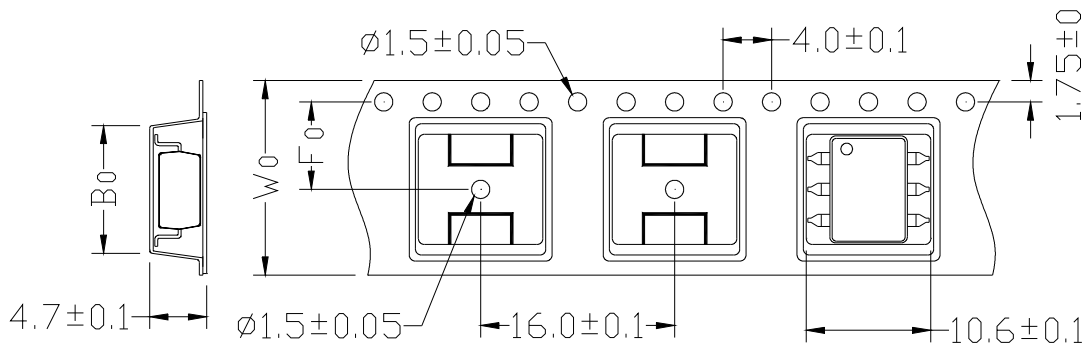


Unit : mm [inch]  
Tolerance :  $\pm 0.1$

### Tape dimensions



### Dimensions of tape reel



Unit: mm

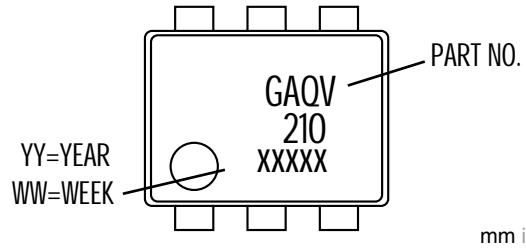
TYPE	B0 $\pm 0.1$	F0 $\pm 0.1$	W0 $\pm 0.1$	13"REEL/PCS
6P	9.4	7.5	16	1000

## Dimensions

### 6-DIP

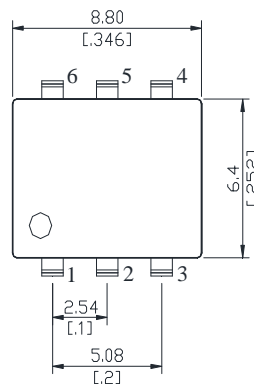
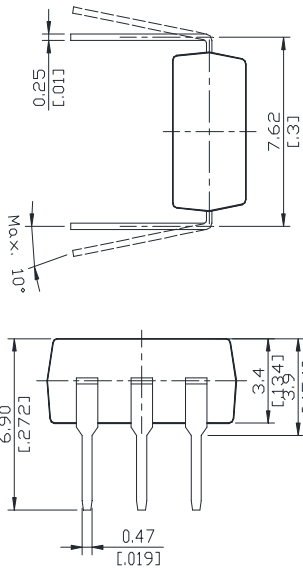


Dimensions



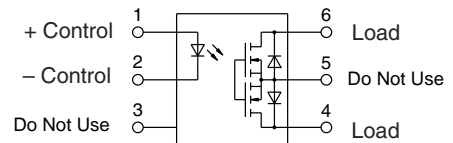
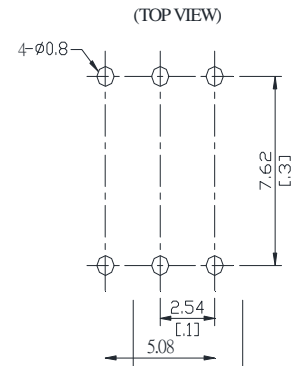
mm inch

Through hole terminal type



Unit : mm inch  
Tolerance: +0.2 +.007

PC board patter



### 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.

