



Features

- Low driver power requirements (TTL/CMOS Compatible)
- High reliability
- Arc-Free with no snubbing circuits
- 3750Vrms Input/Output isolation
- Tape & Reel version available

Applications

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

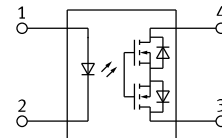
Outline Dimensions



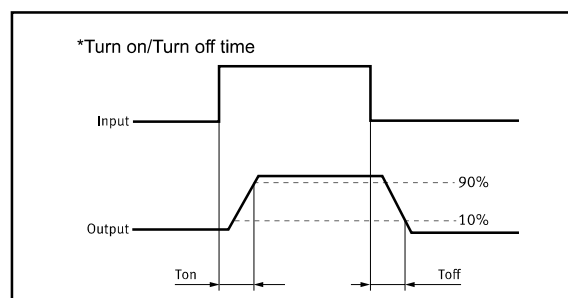
DIP4



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	350V	0.15A	DIP4	GAQY210E	50pcs/tube
			SMD4	GAQY210EH	1000pcs/1reel

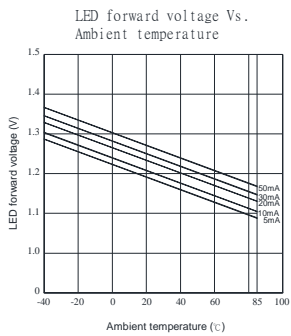
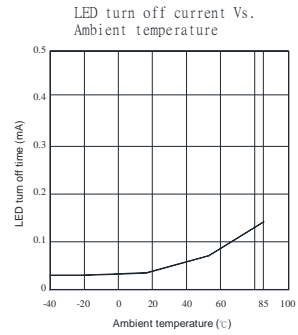
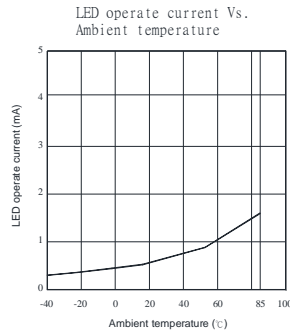
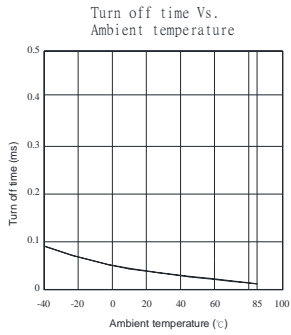
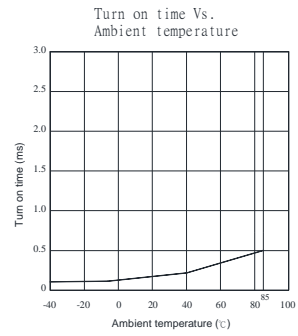
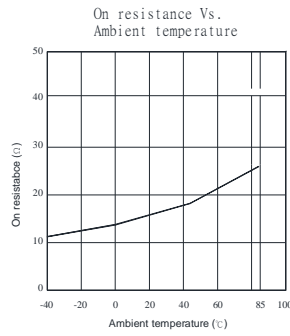
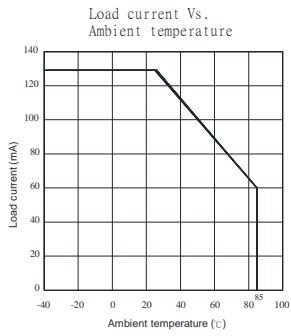
Absolute Maximum Ratings (Ambient Temperature: 25 °C)

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	350	V(AC peak or DC)	
	Load Current	I_L	150	mA	
	Peak Load Current	I_{Peak}	0.6	A	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	V _{rms}	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.

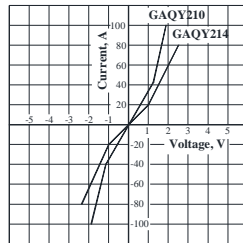
Electrical Specifications (Ambient Temperature: 25 °C)

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	1.0	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}		17	24	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}		115		pF	$V_L=0, f=1MHz$
Transmission	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

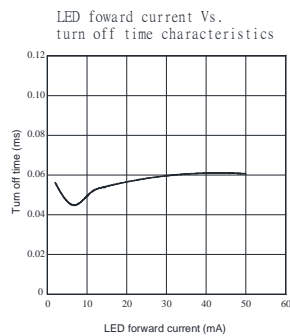
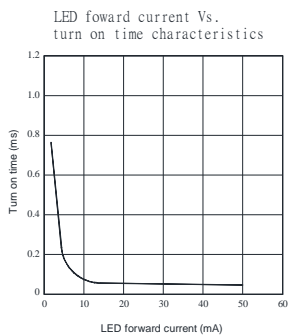
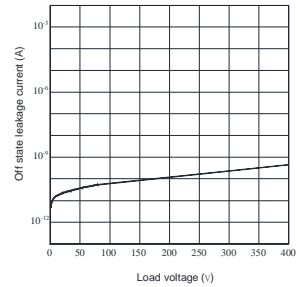
Reference Data



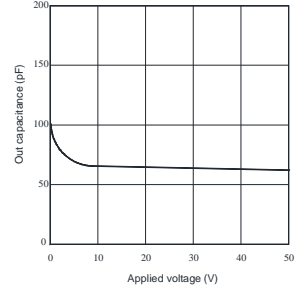
Voltage Vs. current characteristics of output at MOS portion



Off state leakage current Vs. Load voltage characteristics



Applied voltage Vs. output capacitance characteristics



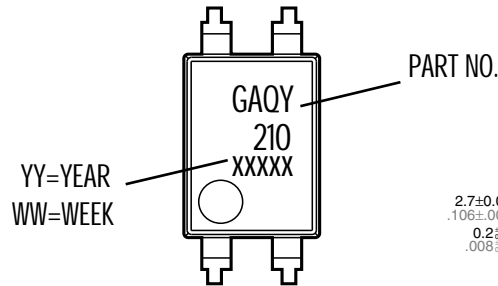
Dimensions

4-SMD

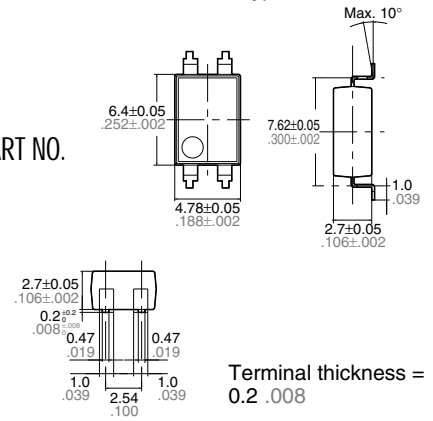


Dimensions

mm inch

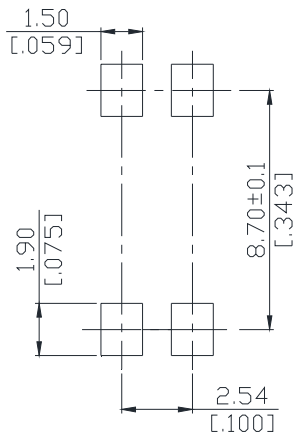


Surface mount terminal type

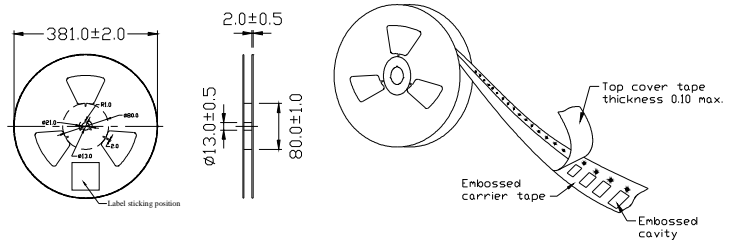


General tolerance: ±0.1 ±0.04

PC board pattern (Top view)

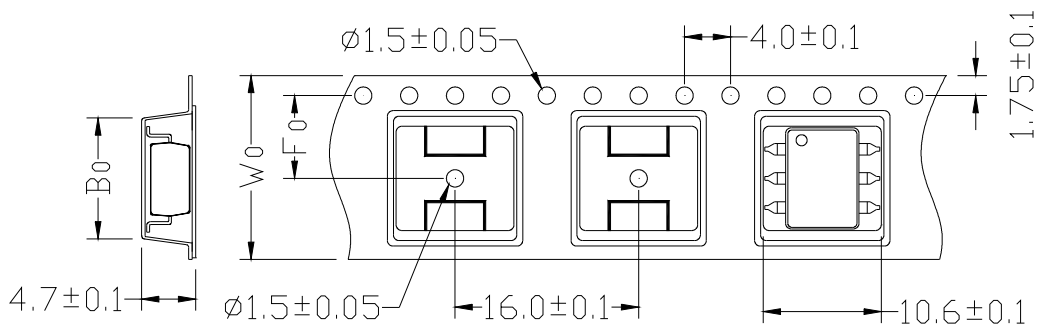


Tape dimensions



Unit : mm [inch]
Tolerance : ±0.1

Dimensions of tape reel

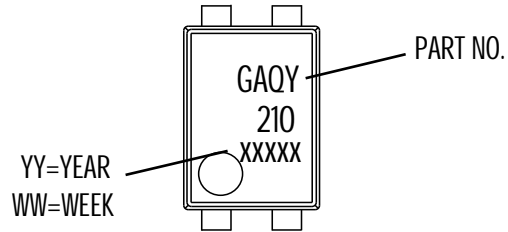


Unit: mm

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

Dimensions

4-DIP



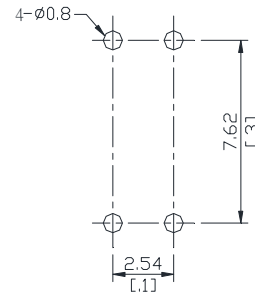
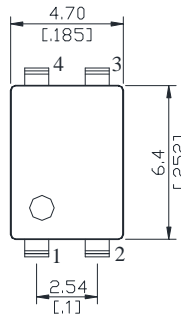
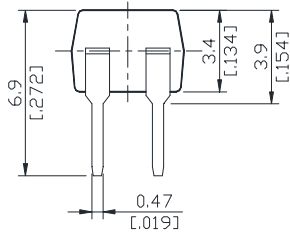
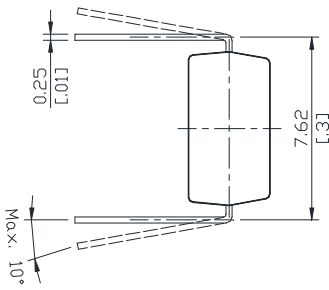
mm inch

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.

