



Features

- Low driver power requirements (TTL/CMOS Compatible)
- Contact form: Normally-Off (1b)
- Load voltage: 400V max.
- On-Resistance: 50Ω max.
- 3750Vrms Input/Output isolation
- Tape & Reel version available

Applications

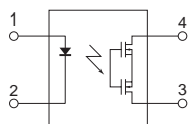
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine



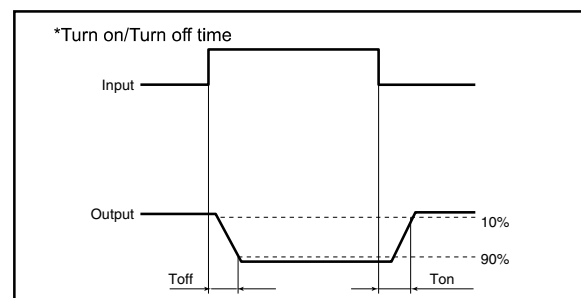
DIP4



SMD4



1. LED Anode
2. LED Cathode
3. Drain (MOSFET)
4. Drain (MOSFET)



TYPES

Category	Output rating		Package	Part No.	Packing quantity
	Load voltage	Load current			
AC/DC	400V	120mA	DIP4	GAQY414E	50pcs/tube
			SMD4	GAQY414EH	1000pcs/reel

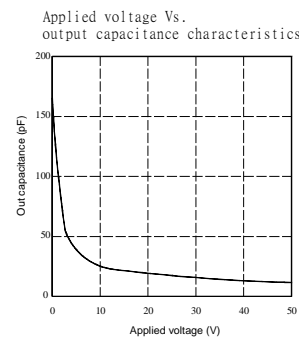
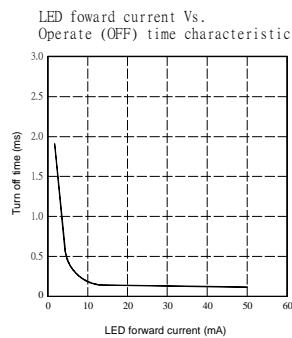
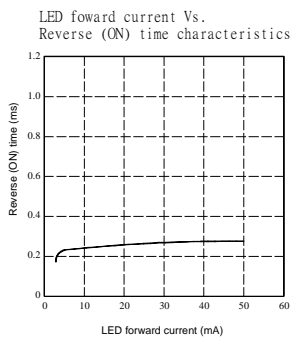
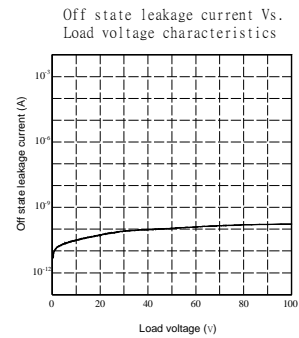
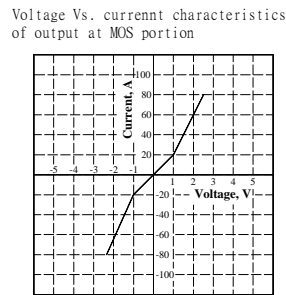
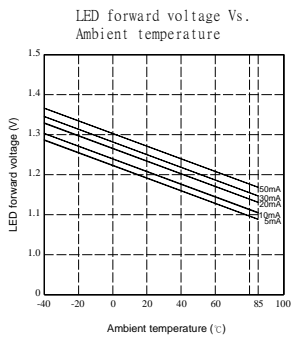
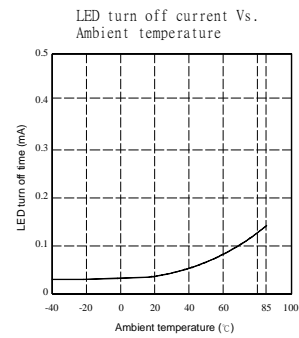
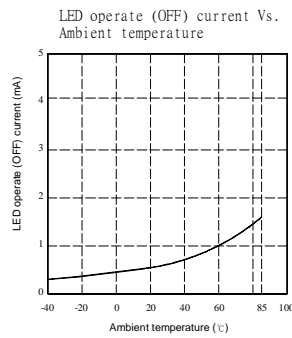
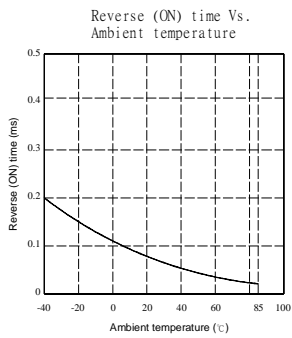
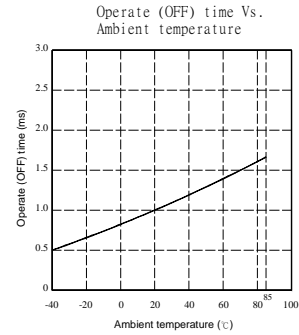
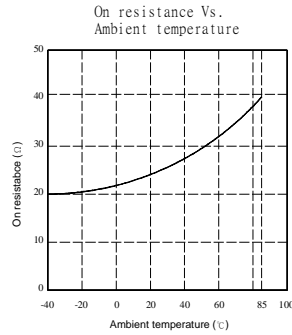
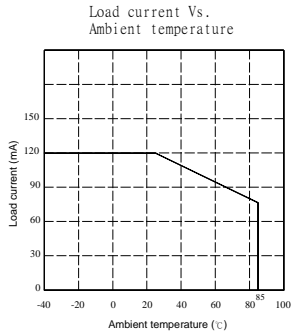
Absolute Maximum Ratings (Ambient Temperature: 25°C)

Item		Symbol	Value	Units	Note
Input	Continuous LED Current	I _F	50	mA	
	Peak LED Current	I _{FP}	500	mA	f=100Hz, duty=1%
	LED Reverse Voltage	V _R	5	V	
	Input Power Dissipation	P _{In}	75	mW	
Output	Load Voltage	V _L	400	V(AC peak or DC)	
	Load Current	I _L	120	mA	
	Peak Load Current	I _{Peak}	0.3	A	1ms(1 pulse)
	Output Power Dissipation	P _{Out}	500	mW	
Total Power Dissipation		P _T	550	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)

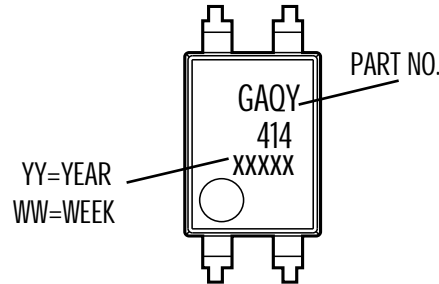
Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V _F		1.2	1.4	V	I _F =10mA
	Operation LED Current	I _{Fon}		0.5	3.0	mA	
	Recovery LED Current	I _{Foff}		0.35	0.5	mA	
	Recovery LED Voltage	V _{Foff}	0.5			V	
Output	On-Resistance	R _{on}		20	50	Ω	I _F =0mA, I _L =50mA, Time to flow is within 1 sec.
	Off-State Leakage Current	I _{Leak}			10	uA	I _F =5mA, V _L =400V
	Output Capacitance	C _{out}		165		pF	I _F =5mA, V _L =0, f=1MHz
Transmission	Turn-On Time	T _{on}		0.02	1.0	ms	I _F =5mA, I _L =50mA
	Turn-Off Time	T _{off}		0.5	3.0	ms	
Coupled	I/O Isolation Resistance	R _{I/O}	10 ¹⁰			Ω	DC500V
	I/O Capacitance	C _{I/O}		0.8		pF	f=1MHz

Reference Data

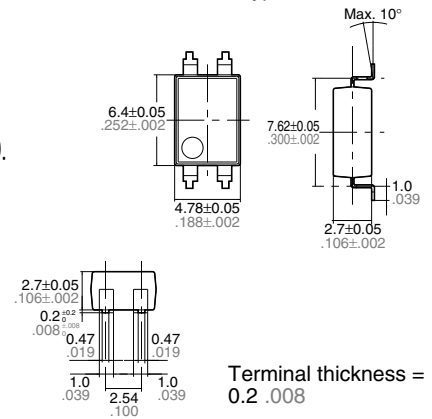


Dimensions

4-SMD

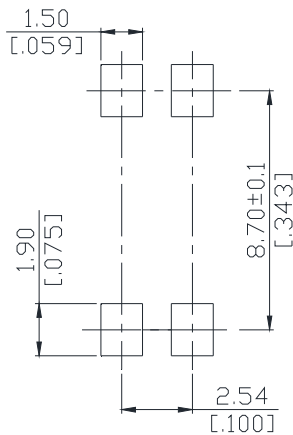


Surface mount terminal type

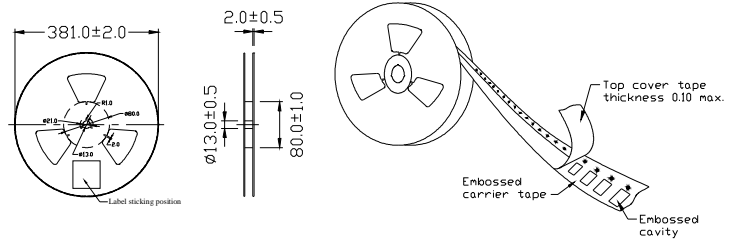


General tolerance: $\pm 0.1 \pm 0.04$

PC board pattern (Top view)

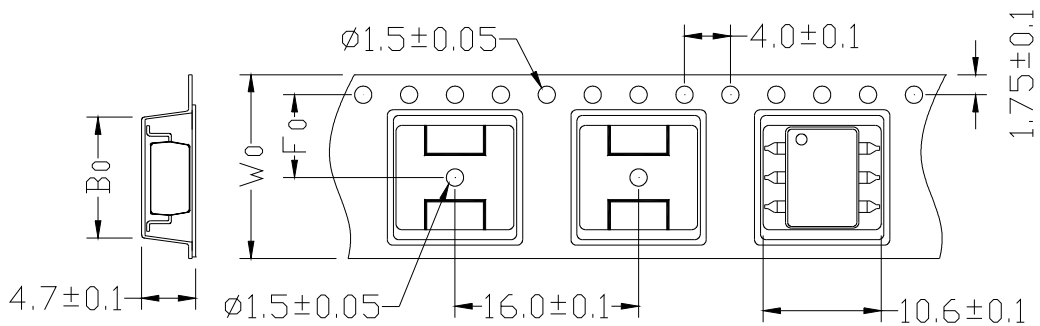


Tape dimensions



Unit : mm [inch]
Tolerance : ± 0.1

Dimensions of tape reel

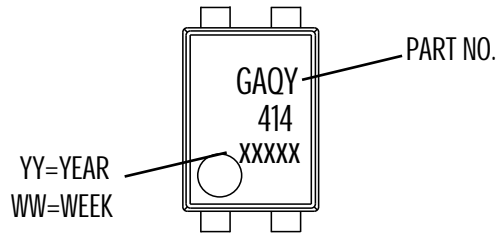


Unit: mm

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

Dimensions

4-DIP



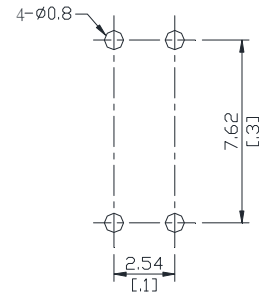
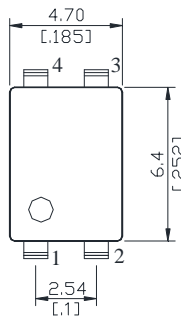
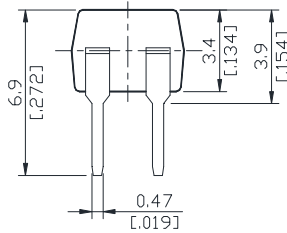
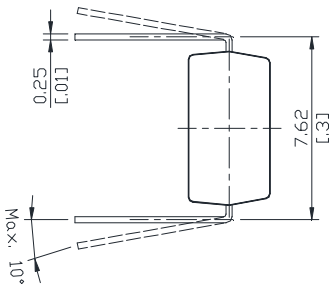
mm inch

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.

