

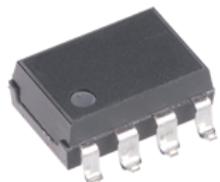


Features

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

Applications

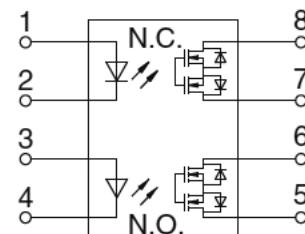
- Telecommunications (PC, Electronic notepad)
- Measuring and Testing equipment
- Industrial control
- Security equipments
- High speed inspection machine



SMD8

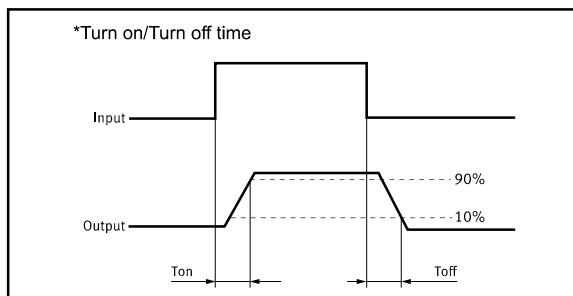


DIP8

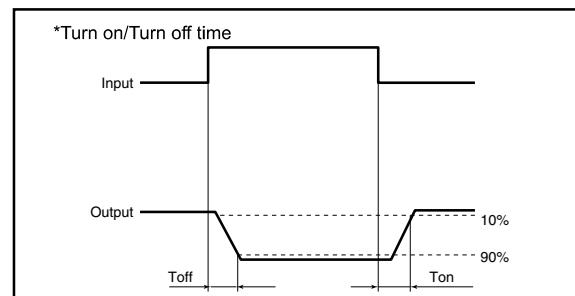


1,3.LED Anode
2,4.LED Cathode
5,6.Drain (MOSFET)1a
7,8.Drain (MOSFET)1b

Normally-On



Normally-Off



TYPES

Category	Output rating		Package	Part No.	Packing quantity
	Load voltage	Load current			
AC/DC	400V	0.12A	DIP8	GAQW614E	50pcs/tube
			SMD8	GAQW614EH	1000pcs/1reel

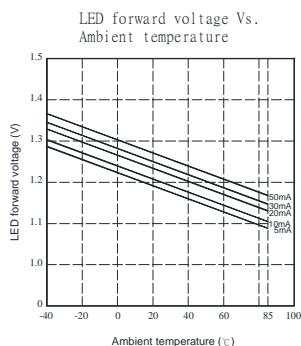
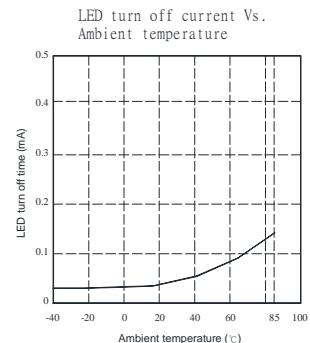
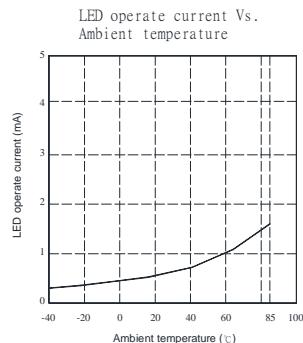
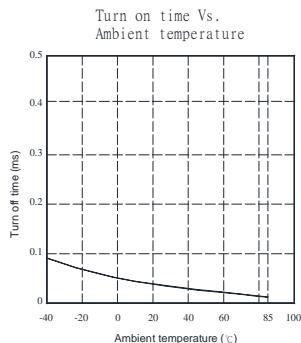
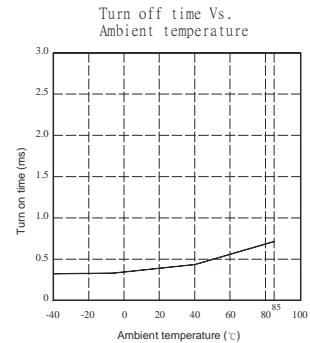
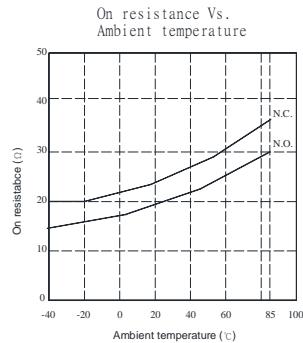
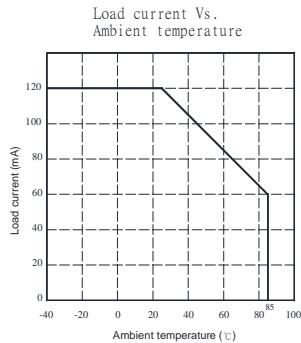
Absolute Maximum Ratings (Ambient Temperature: 25 °C)

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	400	V(AC peak or DC)
	Load Current	IL	120	mA
	Peak Load Current	IPeak	0.6	A 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.

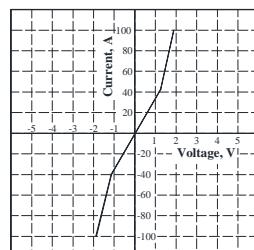
Electrical Specifications (Ambient Temperature: 25 °C)

Item	Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V _F		1.2	V	I _F =10mA
	Operation LED Current	I _{F On}		0.5	mA	
	Recovery LED Current	I _{F Off}		0.35	mA	
	Recovery LED Voltage	V _{F Off}	0.5		V	
Output	On-Resistance	R _{on}		20 _(N.O.)	30 _(N.O.)	Ω I _F =5mA (N.O.) I _F =0mA (N.C) I _L =100mA Time to flow is within 1 sec.
				20 _(N.C.)	50 _(N.C.)	
	Off-State Leakage Current	I _{Leak}		1 _(N.O.)	uA	I _F =0mA (N.O.) I _F =5mA (N.C) V _L = Rating
				10 _(N.C.)		
Transmission	Output Capacitance	C _{out}		150	pF	I _F =5mA, V _L =0, f=1MHz
	Turn-On Time	T _{on}		0.23(N.O.)	0.5(N.O.)	ms I _F =5mA, I _L =50mA
				0.2(N.C.)	1.0(N.C.)	
	Turn-Off Time	T _{off}		0.03(N.O.)	0.2(N.O.)	
				0.5(N.C.)	3.0(N.C.)	
Coupled	I/O Isolation Resistance	R _{io}	10 ¹⁰		Ω	DC500V
	I/O Capacitance	C _{io}		0.8	pF	f=1MHz

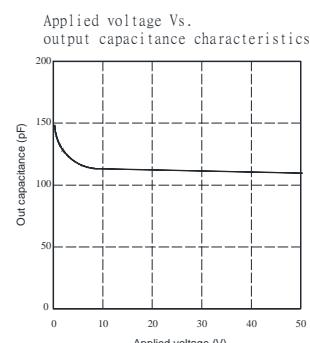
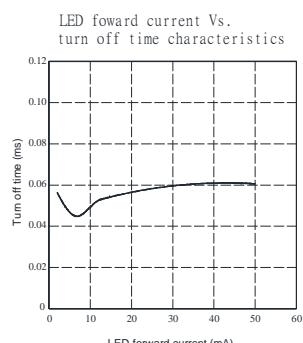
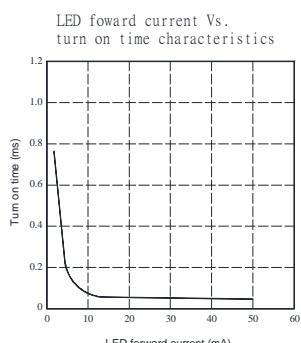
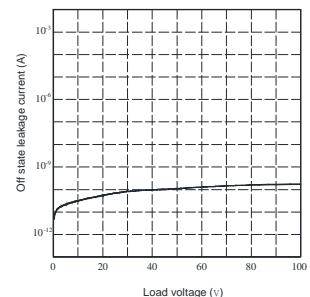
Reference Data



Voltage Vs. current characteristics
of output at MOS portion



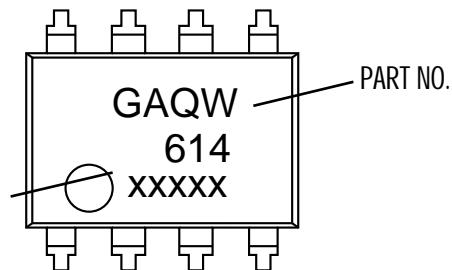
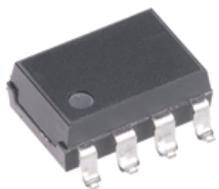
Off state leakage current



8-SMD

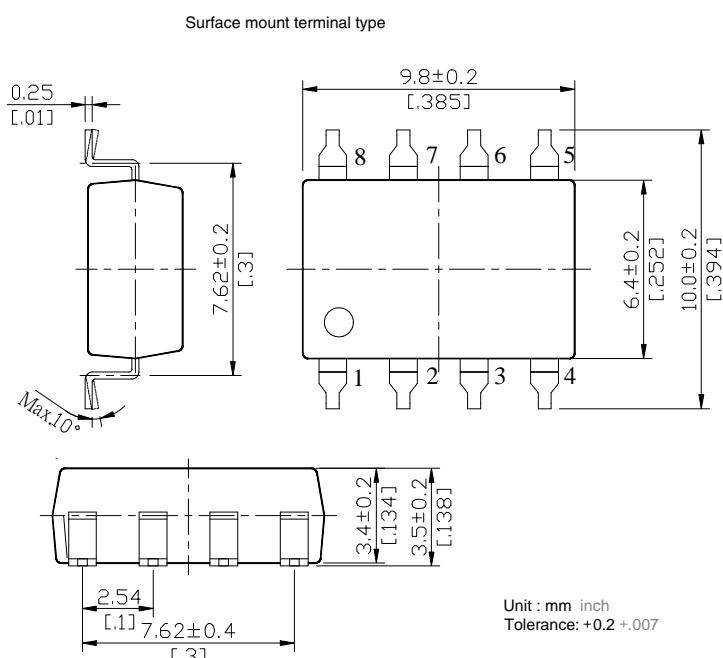
Dimensions

mm inch

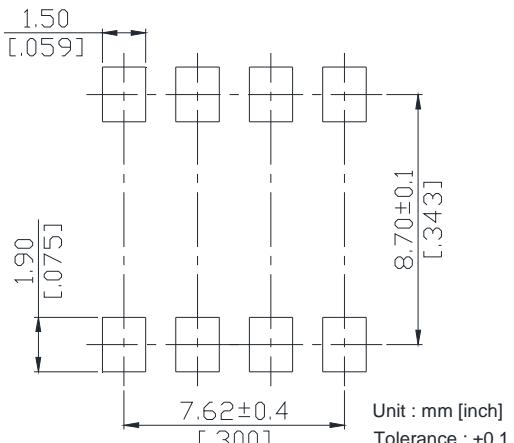


YY=YEAR
WW=WEEK

GAQW
614
XXXXX

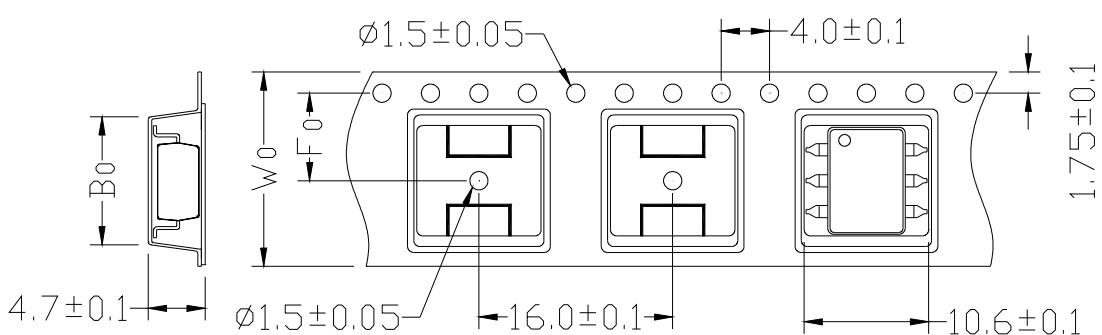


PC board pattern
(Top view)

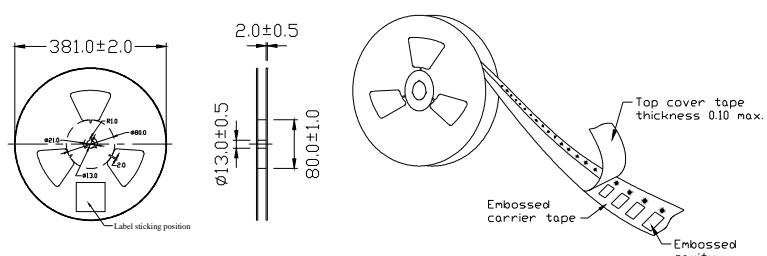


Tape dimensions

Direction of feed

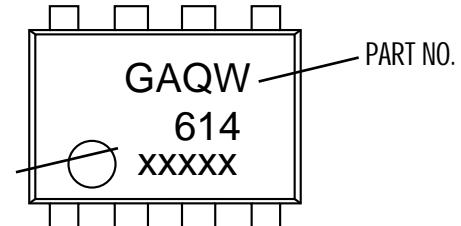


Dimensions of tape reel

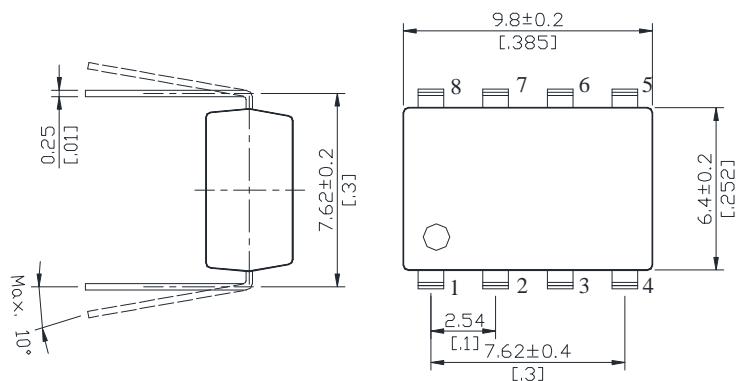


8-DIP

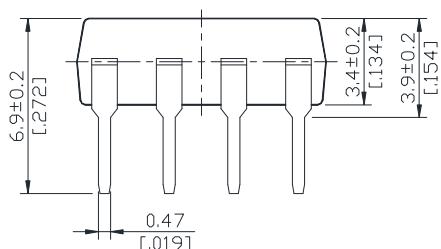
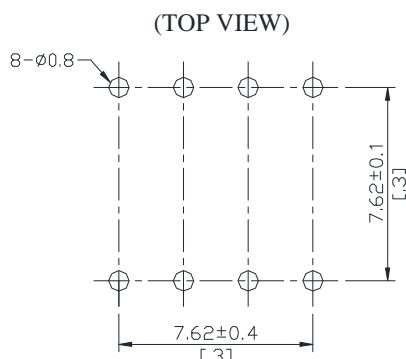
Dimensions



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.

