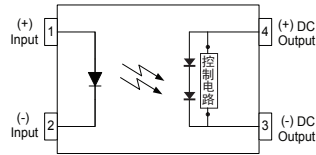
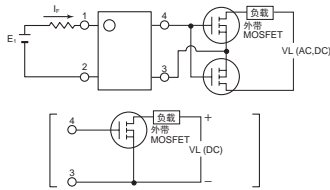




Parameter	Symbol	Rating	Units
Short circuit current	I _{sc}	8	uA
Drop-out voltage	V _{oc}	8	V
Turn-On Time	T _{on}	0.23	ms
I/O Breakdown Voltage	V _{io}	2500	V _{rms}



1. LED Anode
2. LED Cathode
3. Cathode
4. Anode

(Unit: mm)



SOP-4

Function

1. High-speed switching

Since release time is 0.1 ms, the MOSFET or other load can be turned off quickly in urgent situations.

2. Space saving

With a built-in control circuit, an external resistor is not needed. This contributes to making substrates more compact.

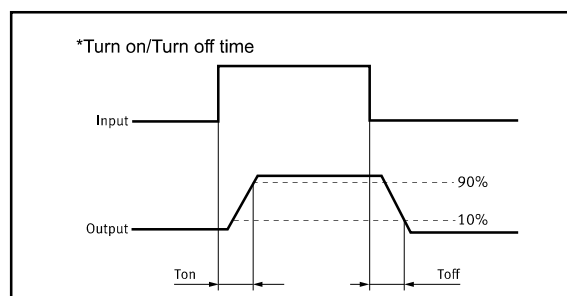
Applications

MOSFET driver

Power supply (V_{cc}) for electronic circuits

TPYES

Category	Output Rating		Package	Part No.	Packing Quantity
	Drop-out voltage (Typ.)	Short circuit current (Typ.)			
Driver	8V	8uA	SOP-4	GAQV1122S	2000pcs /reel



Absolute Maximum Ratings (Ta = 25°C)

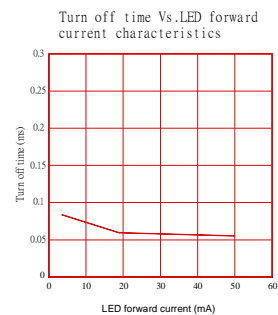
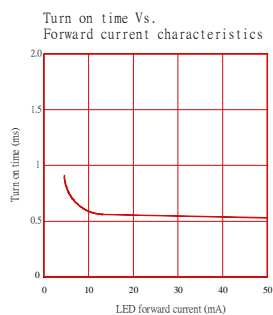
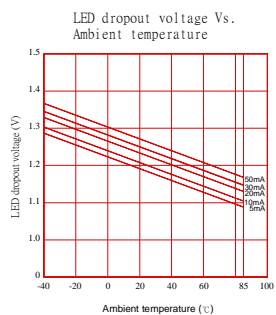
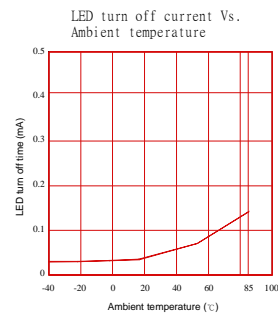
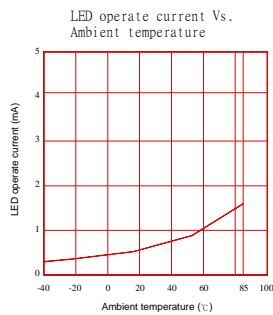
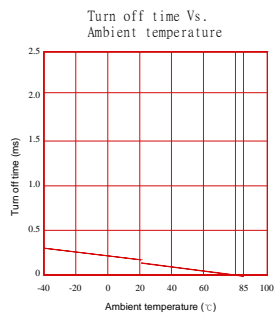
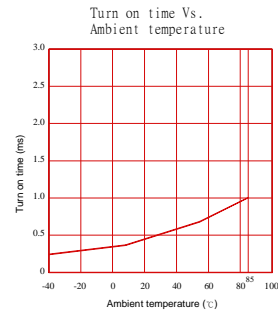
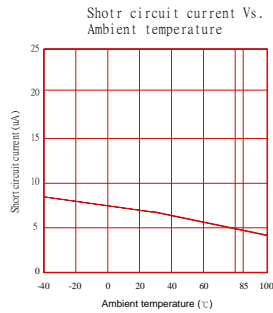
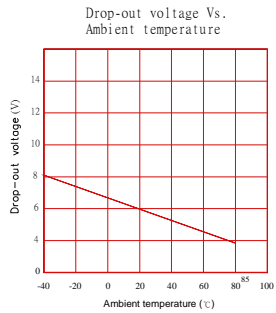
Item		Symbol	Value	Units	Note
Input	Continuous LED Current	I _F	50	mA	
	Peak LED Current	I _{FP}	1000	mA	f=100Hz, duty=1%
	LED Reverse Voltage	V _R	5	V	
	Input Power Dissipation	P _{In}	75	mW	
I/O Breakdown Voltage		V _{I/O}	2500	V _{rms}	RH=60%, 1min
Operating Temperature		T _{Opr}	-40 to +85	°C	
Storage Temperature		T _{Stg}	-40 to +100	°C	

Electrical Characteristics (Ta = 25°C)

Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V _F		1.2	1.4	mA	I _F =10mA
	Operation LED Current	I _{F On}		0.5	3.0	mA	V _{oc} =5V
	Recovery LED Current	I _{F Off}		0.35	0.6	mA	V _{oc} =1V
Output	Drop-out Voltage	V _{cc}	6	8		V	I _F =10mA
	Short Circuit Current	I _{sc}	3	8		uA	I _F =10mA
Transmis sion	Turn-On Time	T _{On}		0.23		ms	I _F =10mA
	Turn-Off Time	T _{of}		0.03		ms	C _L =1000pF
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

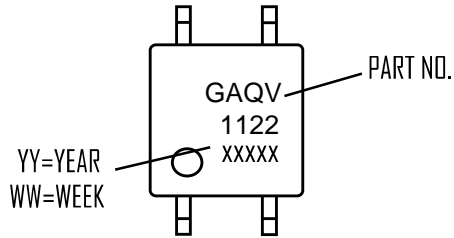
Please obey the following conditions to ensure proper device operation and resetting. Input LED current (Recommended value): I_F ≥ 10mA and ≤ 30mA

Engineering Data

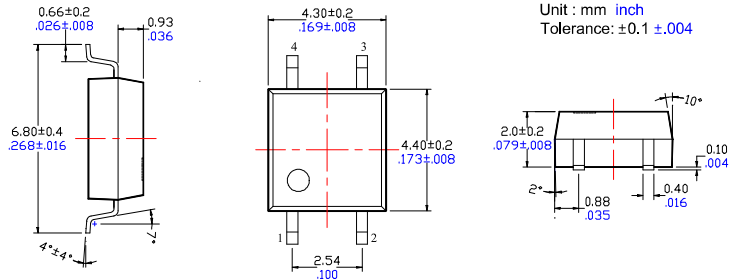


Dimensions and Package

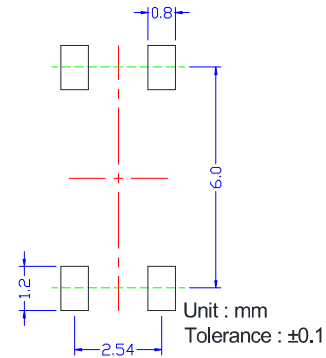
Marking



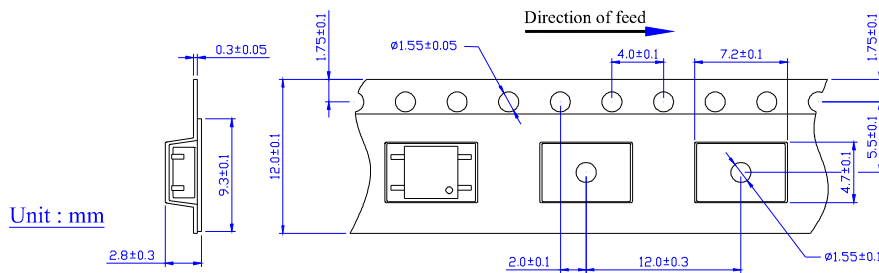
Surface mount terminal type



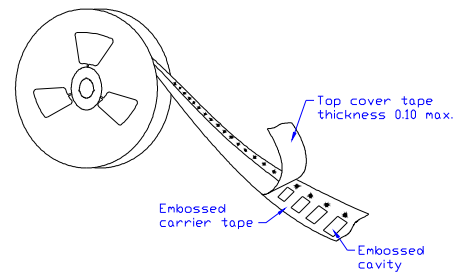
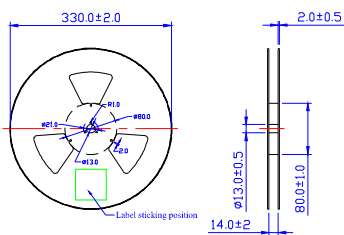
Recommended mounting pad (Top view)



Tape dimensions

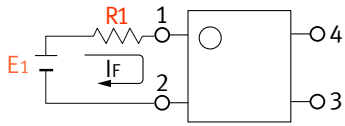


Dimensions of tape reel



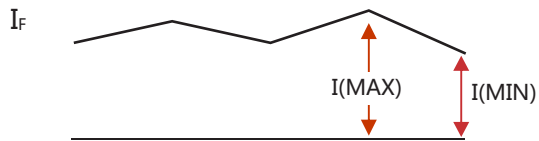
Using Methods

Examples of resistance value to control LED forward current ($I_F=20\text{mA}$)



E1	R1 (Approx)
3.3V	100 Ω
5.0V	180 Ω
12V	500 Ω
24V	1.1K Ω

LED forward current must be more than 10mA , at I(MIN) ,and less than 30mA , at I(MAX) .



Recommended Operating Conditions

Please obey the following conditions to ensure proper device operation and resetting. Input LED current (Recommended value):

Characteristic	Symbol	Min	Typ.	Max	Unit
Forward current	I_F	10	20	30	mA