

Features

- SOP package 4 Pin type in miniature design (4.4X4.3X2.1mm/.173X.169X.083inch)
- Low driver power requirements (TTL/CMOS Compatible)
- No moving parts
- High reliability
- Arc-Free with no snubbing circuits
- 1500Vrms Input/Output isolation
- Tape & Reel version available

Applications

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







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



Types

Category	Output rating		Part No.	Packing quantity	
	Load voltage	Load current	SOP	Tape and reel	
AC/DC	400 V	0.12A	KAQY214STLD	1-reel: 2,000 pcs.	



Absolute Ratings	(Tamb = 25°C)
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Item		Symbol	Value	Units	Note
	Continuous LED Current	lF	50	mA	
Input	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	١L	120	mA	
	Peak Load Current	Peak	0.6	A	100ms(1 pulse)
	Output Power Dissipation	Pout	300	mW	
Total Power Dissipation		P⊤	350	mW	
I/O Breakdown Voltage		Vı/o	1500	Vrms	RH=60%, 1min
Operating Temperature		Topr	-40 to +85	°C	
Storage Temperature		Tstg	-40 to +100	°C	
Pin Soldering Temperature		Tsol	260	°C	10 sec max.

Electrical Characteristics Ratings at 25°C

Item		Symbol	Min.	Тур.	Max.	Units	Conditions
Input	LED Forward Voltage	VF		1.2	1.4	V	I⊧=10mA
	Operation LED Current	F On		0.5	3.0	mA	
	Recovery LED Current	IF Off		0.35	0.5	mA	
	Recovery LED Voltage	VF Off	0.7			V	
Output		Ron		15	20	Ω	l⊧=5mA,l∟=100mA,
	On-Resistance						Time to flow is within 1
							sec.
	Off-State Leakage	h			0.01	uA	V₋=Rating
	Current	Leak					
	Output Capacitance	Cout		45		pF	V∟=0, f=1MHz
Transmis	Turn-On Time	Ton		0.12	0.3	ms	l⊧=5mA, l∟=100mA,
sion	Turn-Off Time	Tof		0.10	0.2	ms	
Coupled	I/O Isolation Resistance	Rı/o	10 ¹⁰			Ω	DC500V
	I/O Capacitance	Cı/o		0.8	1.5	pF	f=1MHz



Reference Data









Off state leakage current Vs. Load voltage characteristics





Voltage Vs. currennt characteristics of output at MOS portion



LED foward current Vs. turn on time characteristics



Applied voltage Vs. output capacitance characteristics



10

20

30

LED forward current (mA)

40

50

60

0.02

0

0



SOP-4 Package Information

Surface mount terminal type





Recommended mounting pad (Top view)

Tape dimensions



Dimensions of tape reel







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