

# SD310A LED driver IC for Pulse Generator

#### 1. Features

- Forward pulse current 50<sup>mA</sup> (Typ.)
- Pulse cycle 5<sup>µs</sup> (Typ.) / Pulse width 0.9<sup>µs</sup> (Typ.)

#### 2. Applications

- Paper detection in office machines (Copier, Fax machines, ETC.)
- Photo sensor switches

#### 4. Description

The SD310A creates LED drive pulses and various timing pulses for digital signal processing.

#### 3. Block Diagram





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## 5. Specifications

### **5.1 Absolute Maximum Ratings**

				(Ta = 25 °C)
ITEM	Symbol	Min	Max	Unit
Supply Voltage	VDD		6	V
Operating temp.	Topr.	-25	60	°C
Storage temp.	Tstg.	-40	100	°C

### **5.2 Electrical Characteristics**

					- 5.0	v, ia	- 25 C
	Parameter	Symbol	Test Condition	Min	Тур	Max	Unit
	Supply current	Idd	No Load	-	-	8.0	mA
	VLED	VLED	VDD = 5V	2	-	-	V
LED Drive	Forward pulse current	IFP	VDD = 5V	45	50	55	mA
Pulse cycle		t <sub>P</sub>	-		5		μs
Pulse width		t <sub>w</sub>	_		0.9		μs

#### (VDD = 5.0V, Ta = 25 °C)

Rev 1.00



### 6. Application

### 6.1 Application Circuit







### 7. Chip Information



PAD	X[um]	Y[um]		
VSS	120.1	152.3		
VDD	507.7	154.6		
Ουτ	507.7	319.9		



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