

PHOTOVOLTAIC MOSFET DRIVER

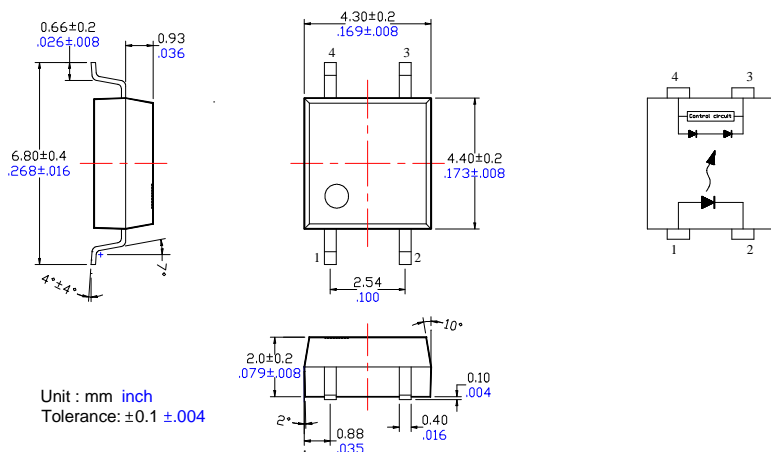
Features

- SOP package 4 Pin type in miniature design (4.4×4.3×2.0mm / .173×.169×.083inch)
- High-speed switching
- 2500Vrms Input/Output isolation
- Tape & Reel version available

Applications

- MOSFET driver
Power supply (Vcc) for electronic circuits

Outline Dimensions



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

PHOTOVOLTAIC MOSFET DRIVER**Part Name: LTP-1G2**

Absolute Maximum Ratings (Ambient Temperature: 25°C)

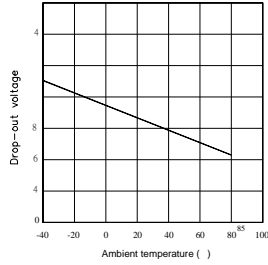
Item	Symbol	Value	Units	Note	
Input	Continuous LED Current	I _F	50	mA	
	Peak LED Current	I _{FP}	1000	mA	f=100Hz, duty=1%
	LED Reverse Voltage	V _R	5	V	
	Input Power Dissipation	P _{In}	75	mW	
I/O Breakdown Voltage	V _{I/O}	2500	V _{rms}	RH=60%, 1min	
Operating Temperature	T _{Opr}	-40 to +85	°C		
Storage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

Electrical Specifications (Ambient Temperature: 25°C)

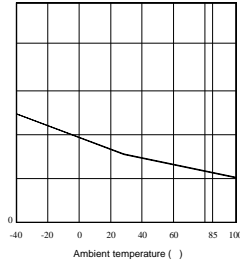
Item	Symbol	MIN.	TYP.	MAX.	Units	Conditions	
Input	LED Forward Voltage	V _F		1.2	1.4	V	I _F =10mA
	Operation LED Current	I _{F On}		0.5	3.0	mA	V _{oc} =5V
	Recovery LED Current	I _{F Off}		0.35	0.5	mA	V _{oc} =1V
Output	Drop-out Voltage	V _{cc}	6	8		V	I _F =10mA
	Short Circuit Current	I _{sc}	3	8		uA	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

Reference Data

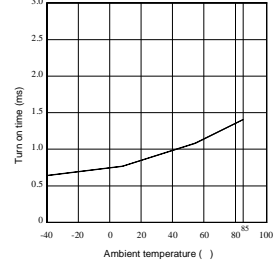
Drop-out voltage Vs. Ambient temperature



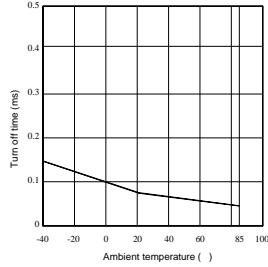
Shotr circuit current Vs. Ambient temperature



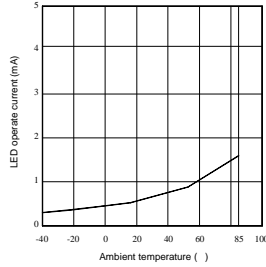
Turn on time Vs. Ambient temperature



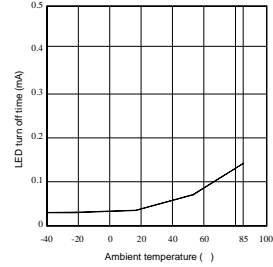
Turn off time Vs. Ambient temperature



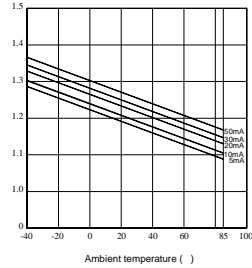
LED operate current Vs. Ambient temperature



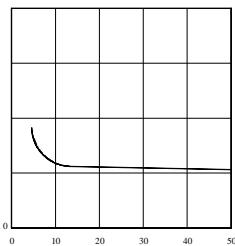
LED turn off current Vs. Ambient temperature



LED dropout voltage Vs. Ambient temperature



Turn on time Vs. Forward current characteristics



Turn off time Vs. LED forward current characteristics

