

GL3277

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PREAMPLIFIER FOR REMOTE CONTROL USE

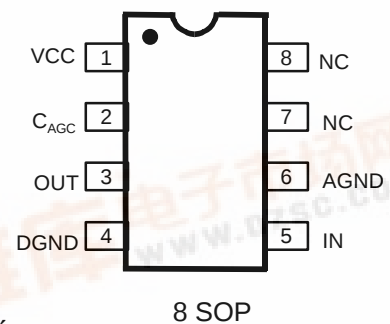
Description

The GL3277 is a bipolar analog ICs specifically developed for use in infrared remote control system receiving preamplifiers.

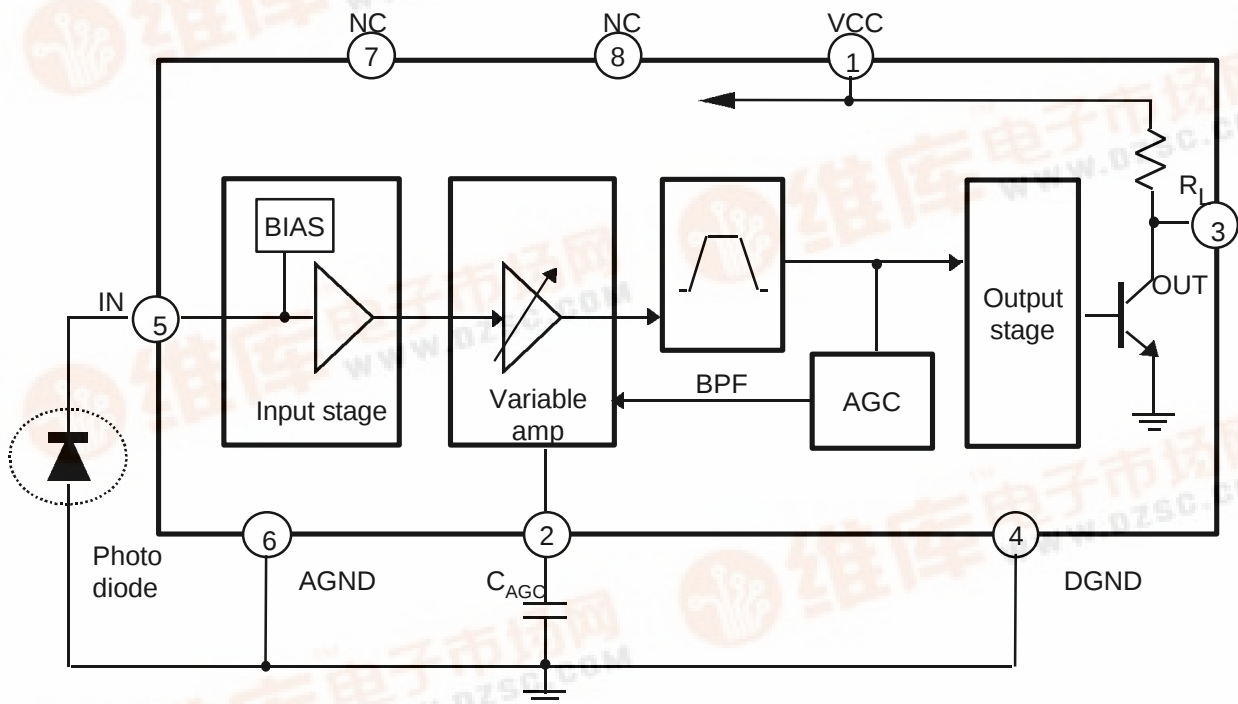
Features

- Enhanced immunity against all kinds of disturbance light
- No occurrence of disturbance pulses at the output
- Output active low
- Simple applications
- Support RC-5 code , NEC code
- Operating frequency : 38kHz; 2.5kHz @ $V_{CC}=5V$, $T_a=25^\circ C$

Pin Configurations



Block Diagram



The information in this document is subject to change without notice.

Absolute Maximum Ratings (Ta=25; unless otherwise noted)

Characteristics	Pin	Symbol	Value	Unit
Power Supply Voltage	1	VCC	6	Vdc
Storage Temperature Range	-	Tstg	-40 to +125	°C

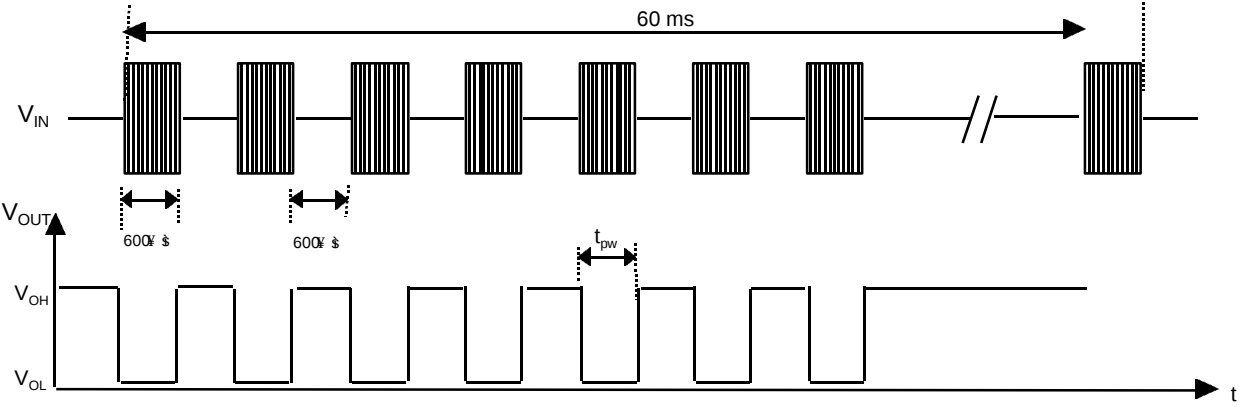
Recommended Operating Condition

Characteristics	Pin	Symbol	Value	Unit
Operating Supply Voltage	1	VCC	4.5 to 5.5	Vdc
Operating Temperature Range	-	Ta	0 to 70	°C

Electrical Characteristics (VCC=5V, Ta=25; foper=38kHz, unless otherwise noted)

Characteristics	Symbol	Conditions	MIN	TYP	MAX	Unit	REMARK
Operating Supply Current	Icc	No Signal	0.3	0.7	1.7	mA	
Input Voltage	VIN	IIN = 0A IIN = -330μA	3.6 0.8	4.1 1.3	4.6 1.8	V	
Voltage Gain	Av_max	VIN = 30μA Pin2=1.5V	80	-	110	dB	
	Av_min	VIN = 30μA Pin2=2.5V	40	-	80	dB	
BPF Bandwidth (-3dB)	fBW	VIN = 30μA	-	5	-	kHz	
Output Pulse Width	tpw1	fIN = 38kHz burst VIN = 500μA	440	600	770	μs	note 1
	tpw2	fIN = 38kHz burst VIN = 50mVpp	440	600	770	μs	
Low Level Output Voltage	VOL	-	-	0.2	0.4	V	
High Level Output Voltage	VOH	-	4.8	5.0	-	V	

note 1



Pin Descriptions

No	Symbol	Description	
1	VCC	Supply vtg.	Supply voltage of 5V; $\pm 10\%$
2	C _{AGC}	AGC cap.	AGC capacitor connected.
3	OUT	Output	Open collector output with pull-up resistance. Active low output.
4	DGND	Ground	Input stage, Variable amp, AGC, BPF ground
5	IN	Input	Input connection for photodiode with bias voltage
6	AGND	Ground	Output stage ground
7	NC	-	-
8	NC	-	-

Application Circuit

