

# GL3277

## PREAMPLIFIER FOR REMOTE CONTROL USE

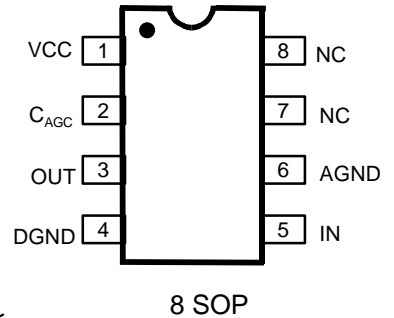
### Description

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

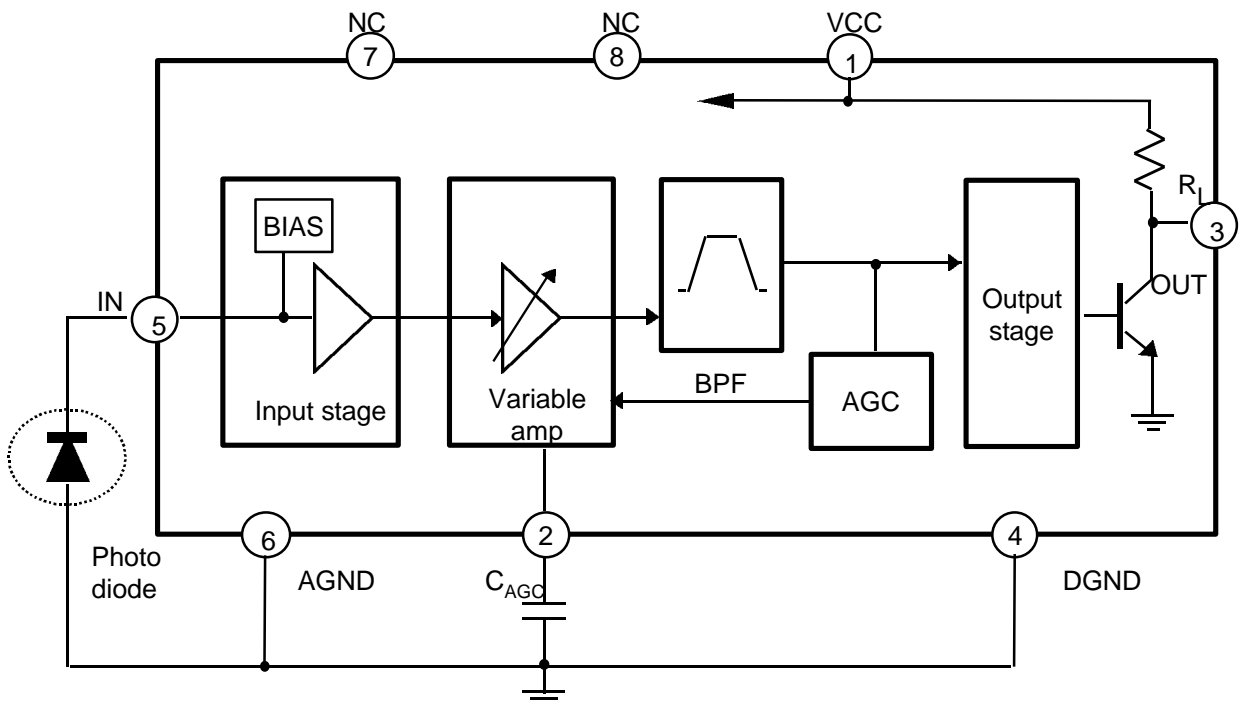
### Features

- 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; 45kHz @  $V_{cc}=5V, T_a=25; \dot{E}$

### Pin Configurations



### Block Diagram



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

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

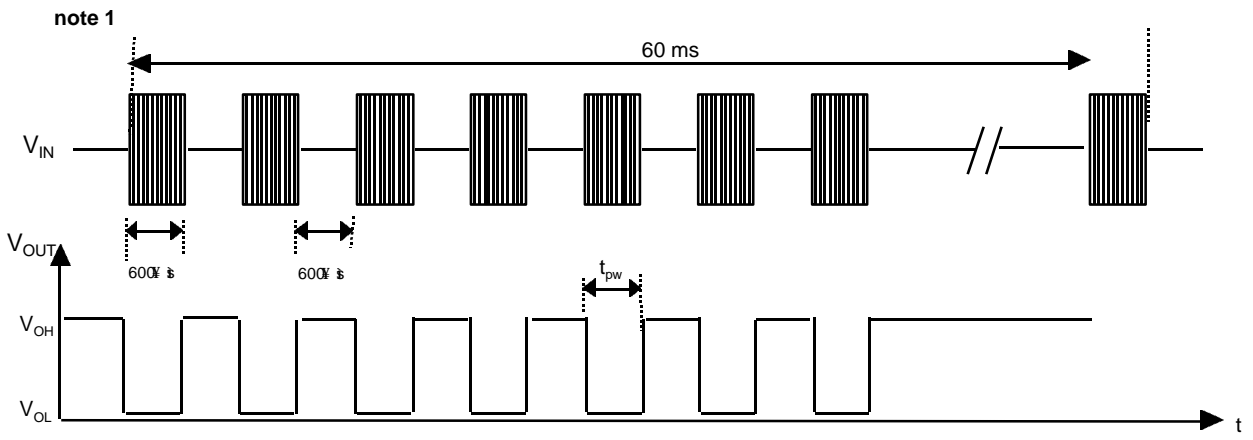
Characteristics	Pin	Symbol	Value	Unit
Power Supply Voltage	1	VCC	6	Vdc
Storage Temperature Range	-	Tstg	-40 to +125	°C

**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 = 30mVp Pin2=1.5V	80	-	110	dB	
	Av_min	VIN = 30mVp Pin2=2.5V	40	-	80	dB	
BPF Bandwidth (-3dB)	fBW	VIN = 30mVp	-	5	-	kHz	
Output Pulse Width	tpw1	fIN = 38kHz burst VIN = 500mVp	440	600	770	µs	note 1
	tpw2	fIN = 38kHz burst VIN = 50mVp	440	600	770	µs	
Low Level Output Voltage	VOL	-	-	0.2	0.4	V	
High Level Output Voltage	VOH	-	4.8	5.0	-	V	



**Pin Descriptions**

No	Symbol	Description	
1	VCC	Supply vtg.	Supply voltage of 5V; $\pm 10\%$
2	C <sub>AGC</sub>	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**

