

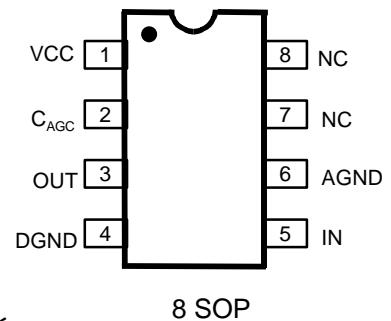
# GL3277

## PREAMPLIFIER FOR REMOTE CONTROL USE

### Description

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

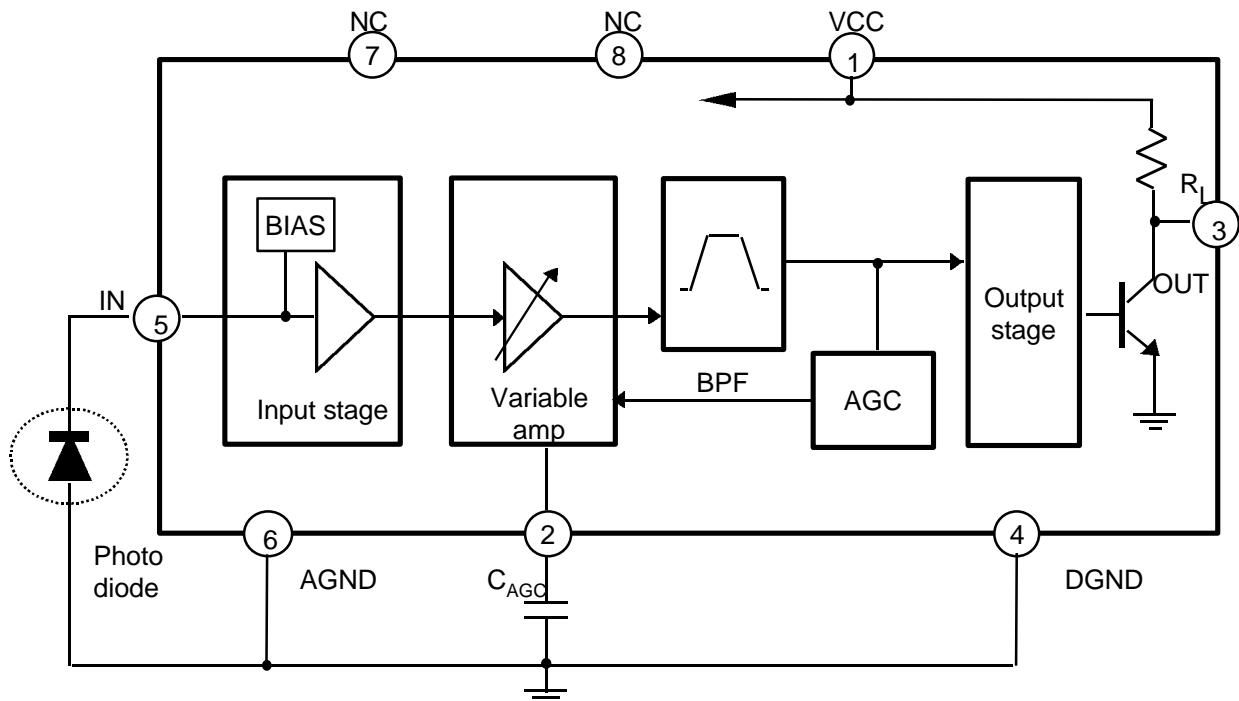
### Pin Configurations



### 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, 245kHz @ Vcc=5V, Ta=25°C

### Block Diagram



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

**Absolute Maximum Ratings** ( $T_a=25^\circ C$ , unless otherwise noted)

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

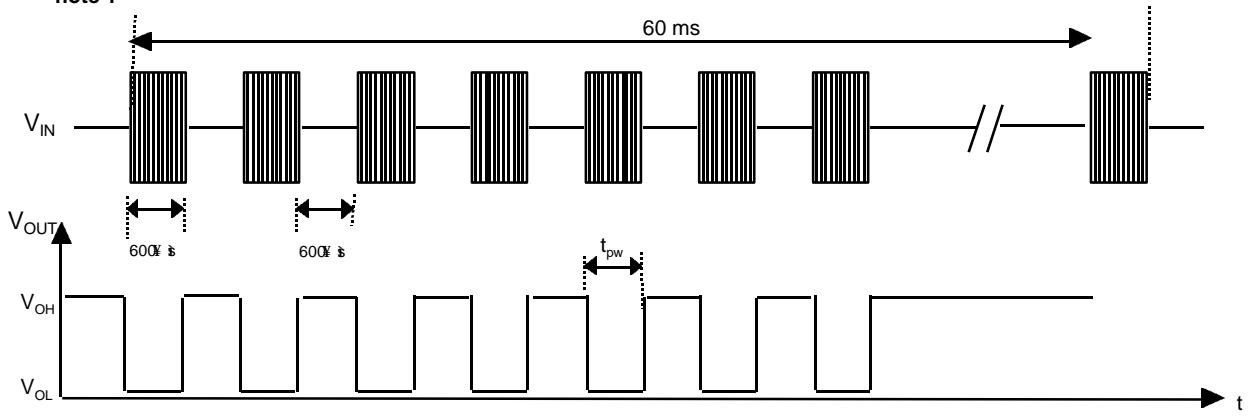
**Recommended Operating Condition**

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

**Electrical Characteristics** ( $V_{CC}=5V$ ,  $T_a=25^\circ C$ ,  $f_{oper}=38kHz$ , unless otherwise noted)

Characteristics	Symbol	Conditions	MIN	TYP	MAX	Unit	REMARK
Operating Supply Current	I <sub>CC</sub>	No Signal	0.3	0.7	1.7	mA	
Input Voltage	V <sub>IN</sub>	I <sub>IN</sub> = 0A I <sub>IN</sub> = -330 $\mu A$	3.6 0.8	4.1 1.3	4.6 1.8	V	
Voltage Gain	Av_max	V <sub>IN</sub> = 30S $\mu p$ Pin2=1.5V	80	-	110	dB	
	Av_min	V <sub>IN</sub> = 30S $\mu p$ Pin2=2.5V	40	-	80	dB	
BPF Bandwidth ( -3dB )	f <sub>BW</sub>	V <sub>IN</sub> = 30S $\mu p$	-	5	-	kHz	
Output Pulse Width	tpw1	f <sub>IN</sub> = 38S $\mu burst$ V <sub>IN</sub> = 500S $\mu o$	440	600	770	ns	note 1
	tpw2	f <sub>IN</sub> = 38S $\mu burst$ V <sub>IN</sub> = 50mV <sub>pp</sub>	440	600	770		
Low Level Output Voltage	V <sub>OL</sub>		-	0.2	0.4	V	
High Level Output Voltage	V <sub>OH</sub>		-	4.8	5.0	-	V

note 1



## Pin Descriptions

No	Symbol	Description	
1	VCC	Supply vtg.	Supply voltage of 5V ± 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

