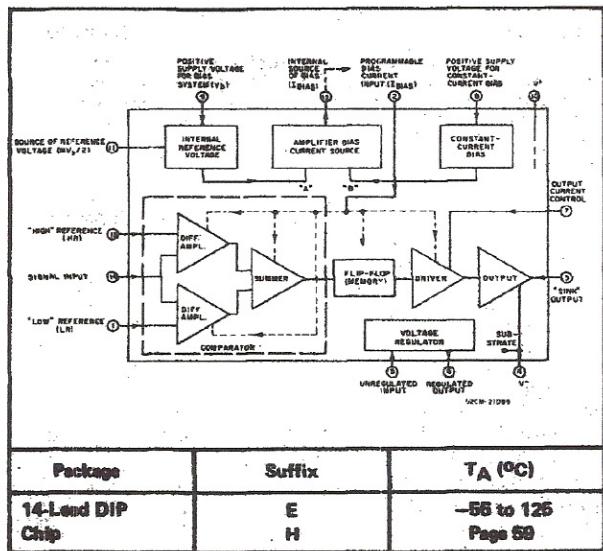




Power Control Circuits

Programmable Comparator....With Memory

CA3099



File No. 620*

Applications and Features

Programmable operating current
Micro-power standby dissipation
Directly controls current up to 150 mA
Low input on/off current of $< 1\text{nA}$
for programmable bias current of 1\mu A
Built-in hysteresis: 10mV max.
Programmable hysteresis: 10mV to V⁺
Dual reference input
High sensor range: 100Ω to $100M\Omega$
Stable predictable switching levels
Temperature-compensated reference voltage

Control of relays, heaters, LED's, lamps
photo-sensitive devices, thyristors, solenoids, etc.
Signal reconditioning
Phase and frequency modulators
On/off motor switching
Schmitt triggers, level detectors
Time delays
Over-voltage, over-current, over-temperature protection
Battery-operated equipment
Square and triangular-wave generators

Electrical Characteristics at TA = 25°C

Input Offset Voltage: "Low" Reference	V _{LR} = Grd, V _{HR} = 3V, I _{BIAS} = 100 μA	2 mV max
"High" Reference	V _{HR} = Grd, V _{LR} = -3V, I _{BIAS} = 100 μA	5 mV max
Min. Hysteresis Voltage	V _{REG} = 6V, V ⁺ = 12V, I _{BIAS} = 100 μA	10 mV max
Output Saturation Voltage	V _I = 4V, V _{REG} = 6V, V ⁺ = 12V, I _B = 100 μA	1.2 V max
Input Bias Current:	V _I = 4V, V _{REG} = 6V, V ⁺ = 12V, I _B = 100 μA	200 nA max
I _B (p-n-p) I _B (n-p-n)	V _I = 8V, V _{REG} = 6V, V ⁺ = 12V, I _B = 100 μA	60 nA max
Switching Times:	$I_B, I_C = 100\mu\text{A}$	
Delay	V _I [V ⁺ = 5V]	600 ns typ.
Fall	V _{REG} = 2.5V	50 ns typ.
Rise		500 ns typ.
Storage		4.5 μs typ.

Thyristor/Transistor Array

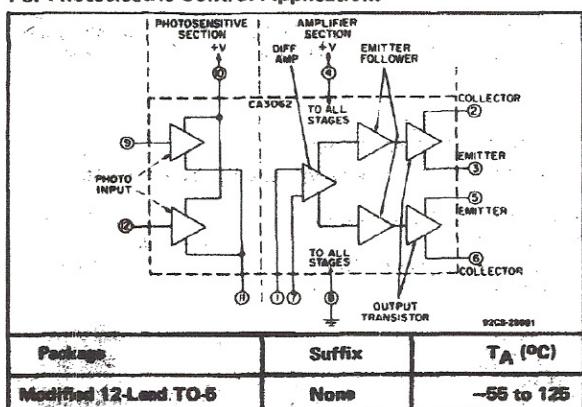
For data, see Arrays, Page 25

CA3097E,H

Photo Detector and Power Amplifier

CA3062

For Photoelectric Control Applications



File No. 421; ICAN-653B*

Applications and Features

Counters	Isolators
Sorting	100 mA output-current capability: can drive a relay or thyristor directly
Level controls	5 to 15 volt dc supply voltage
Inspection	Compact — complete system in a TO-5 style package
Intrusion alarms	Compatible with RCA-40736R Infrared Emitter
Position sensor	
Edge monitoring	

Maximum Ratings at TA = 25°C

Supply Voltage	15	V
Output Current	100	mA
Output Voltage Swing	0 to 15	V

Typical Characteristics at TA = 25°C

Sensitivity:		
Normal "OFF" Output	8	Im/ft ²
Normal "ON" Output	10	Im/ft ²

*Refer to indicated File No. for data bulletin and where given to indicated ICAN No. for application note.

Part Specification**CA3062**

Transistor-Stage Output Photo IC - Photo Detector and Power Amp,Pk WL 725nm,tr 125us
Various
Photo Detectors
Output Circuit Type=TRANS. STA
Vsup Nom.(V)Power Supply Volt.=7.5
Isup Max.(A)Power Supply Curr.=5.5m
Status=Discontinued
Package=Can-8.1