AN83565

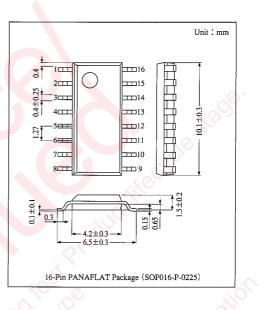
Bar-Code Scanner IC for VCR

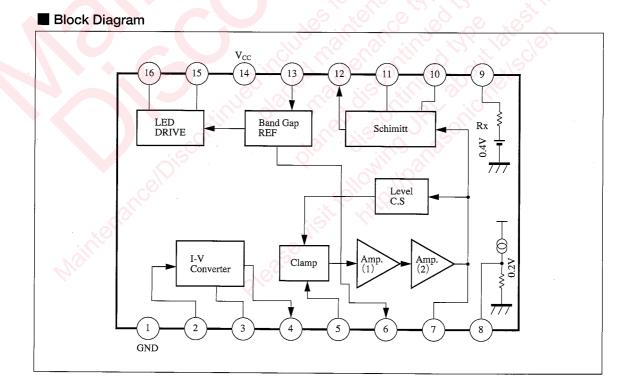
Overview

The AN8356S is an IC developed as a bar code scanner for VCR. It converts a photocurrent received by a photosensor into a voltage waveform and shapes that.

Features

- Low operating voltage : Operable with 2 batteries.
- Built-in LED drive circuit.
- LED drive current is determined by an external resistor.
- \bullet Few external circuits (9) .





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■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit V		
Supply voltage	V _{cc}	5			
Power dissipation	P _D	120	mW		
Operating ambient temperature	T _{opr}	-20 to $+75$	Ĵ		
Storage temperature	T _{stg}	-55 to $+125$	C		

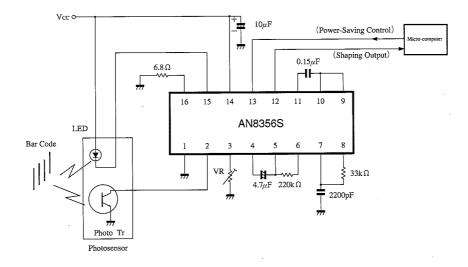
■ Recommended Operating Range (Ta=25°C)

Parameter Symbol		Range	
Operating supply voltage range	V _{cc}	2.2V to 3.5V	

Electrical Characteristics ($V_{CC}=3V, V_{13-1}=0V, Ta=25^{\circ}C$)

Parameter	Symbol	Condition	min	typ	max	Unit
Supply current (ON)	I _{CC1}				5.5	μA
Supply current (OFF)	I _{CC2}	Pin ⁽³⁾ at V _{CC}			2	μA
Output pin voltage "L"	VOL	I ₁₂ =0.5mA			0.4	V
Output pin voltage "H"	V _{он}	$I_{12} = -50 \mu A$	2.5			V
I-V amp. gain	G _{I-V}	$I_2=3\mu A_{P-P}$, f=1kHz, Sine wave. Add 10k Ω to Pin(3) and measure a pin voltage.	-1.5		0.3	dB
Clamp amp. gain	G _{CL}	Add 2.7k Ω to between the Pins (7) and (8), and measure Pin (7) output voltage.	29.5		33.5	dB
Hysteresis width	V _{HI}	f=1kHz, Sine wave. Measure Pin(1) amplitude.	90	—	155	mV
Duty ratio	T _{DT}	$\begin{array}{c} f=1 \text{ kHz, Sine wave.} \\ \text{Measure Pin} \textcircled{2} \text{ duty ratio.} \end{array} T_{\text{DT}}=\frac{T_{\text{L}}}{T_{\text{H}}} \end{array}$	0.85		1.15	
LED drive voltage	V _{CS}	Measure Pin [®] pin voltage	86		114	mV

Application Circuit



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