

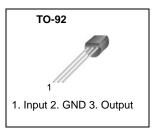
KA75330 Voltage Detector

Features

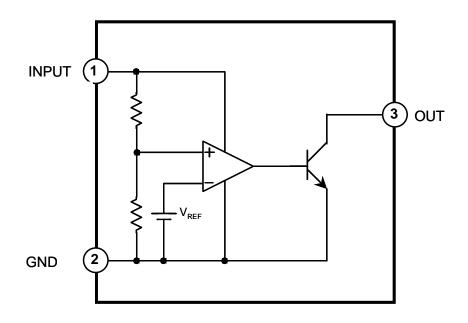
- Detecting Against Error Operations At The Power On/off.
- Resetting Function For The Low Voltage Microprocessor.
- · Checking Low Battery

Description

The KA75330 prevents the error of system from supply voltage below normal voltage level at the time the power on and instantaneous power off in systems.



Internal Block Diagram



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KA75330

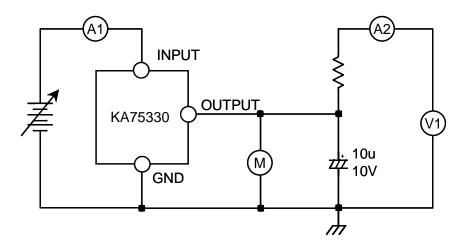
Absolute Maximum Rating (TA=25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	Vcc	0.3 ~ +15.0	V
Detecting Voltage	VDET	3.3	V
Hysteresis Voltage	VHYS	50	mV
Operating Temperature	TOPR	-25 ~ +85	°C
Storage Temperature	TSTG	-50 ~ +150	°C
Power Dissipation (TO-92)	PD	200	mW
Detecting Voltage Temperature Coefficient	ΔVDET/ΔΤ	RL = 200Ω, +0.01	%/°C

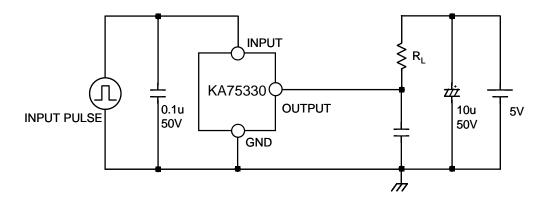
Electrical Characteristics (TA=25°C)

Characteristic	Symbol	Test Conditions	Min	Тур	Max	Unit
Detecting Voltage	Vdet	$R_L = 200\Omega, VOL \le 0.4V$	3.15	3.3	3.45	V
Low Output Voltage	Vol	RL = 200Ω	-	-	0.4	V
Output Leakage Current	ILKG	VCC = 15V	-	-	0.1	uA
Hysteresis Voltage	VHYS	RL = 200Ω	30	50	100	mV
Detecting Voltage Temperature Coefficient	ΔVDET/ΔT	RL = 200Ω	-	±0.01	-	%/°C
Circuit Current(At On Time)	ICCL	VCC = VDET(MIN) -0.05V	-	300	500	uA
Circuit Current(At Off Time)	Іссн	VCC = 5.25V	-	30	50	uA
Threshold Operating Voltage	VTH(OPR)	$R_L = 200\Omega, V_{OL} \le 0.4V$	-	0.8	1.0	V
" L"± Transmission Delay Time	TOL	$R_L = 1.0 k\Omega$, $C_L = 100 pF$	0.6	10	-	us
" H"± Transmission Delay Time	Тон	RL = 1.0kΩ, CL = 100pF	-	15	20	us
Output Current (At On Time)	IOLI	$\label{eq:VCC} \begin{array}{l} VCC = VDET(MIN) \ \text{-}0.05V, \\ T_A = 25^\circC \end{array}$	10	20	30	mA
Output Current (At On Time)	Iolii	V _{CC} = V _{DET} (MIN) - 0.05V T _A = -25 ~ +85°C	8	16	30	mA

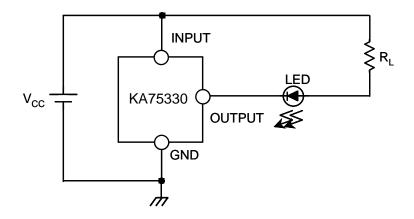
Test Circuit 1.



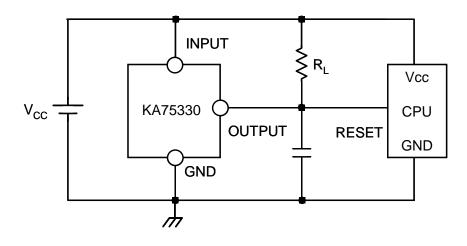
Test Circuit 2.



Test Circuit 3.

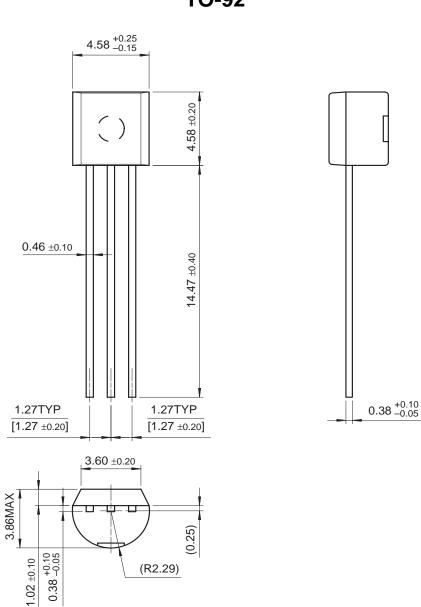


Application Circuit



Package

Dimensions in millimeters



TO-92

Ordering Information

Product Number	Package	Operating Temperature
KA75330Z	TO-92	-25 ~ +85°C

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