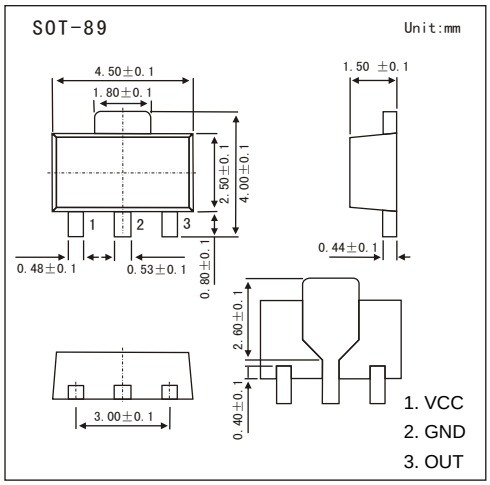
Voltage Detector
KIA7029

■ Features

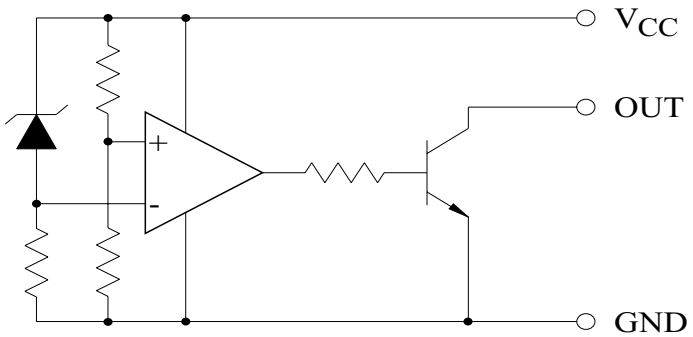
- Current Consumption is Low. I_{CCL}=300㎂ Typ. I_{CCH}=30㎂ Typ.
- Resetting Output Minimum Guarantee Voltage is Low 0.8V Typ.
- Hysteresis Voltage is Provided. 50mV Typ.



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Supply Voltage	V_{CC}	-0.3 to 15	V
Power Dissipation (Package Limitation)	P_D	500	mW
Operating Temperature	Topr	-30 to +75	℃
Storage Temperature	T_{STG}	-55 to +150	℃

■ Equivalent Circuit



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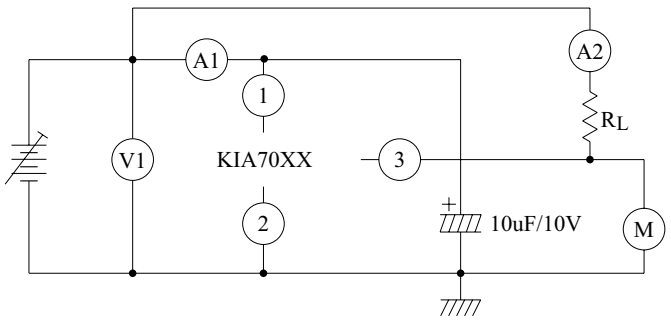
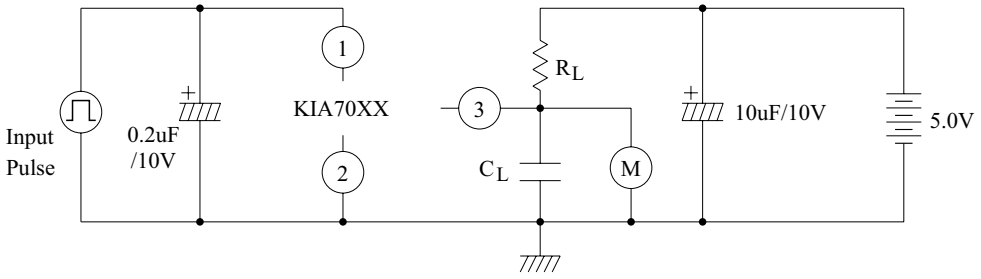
■ Electrical Characteristics (V_{CC}=5V, V_{EE}=GND,Ta = 25℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Detecting Voltage (Test Circuit 1)	V_S	V_{OL} ≤ 0.4V, R_L=200 Ω	2.75	2.9	3.05	V
Low-Level Output Voltage(Test Circuit 1)	V_{OL}	R_L=200 Ω			0.4	V
Output Leakage Current (Test Circuit 1)	I_{OH}	V_{CC}=15V			0.1	μA
Hysteresis Voltage (Test Circuit 1)	△V_S	R_L=200 Ω	30		100	mV
Detecting Voltage Temperature Coefficient	V_S/△T	R_L=200 Ω (Test Circuit 1)		±0.01		%/℃
Circuit Current at on Time (Test Circuit 1)	IccL	V_{CC}=Vsmin.-0.05V		300	500	μA
Output Source Current (Test Circuit 1)	IccH	V_{CC}=5.25V		30	50	μA
Threshold Operating Voltage (Test Circuit 1)	Vopr	V_{OL} ≤ 0.4V, R_L=200 Ω		0.8		V
L Transmission Delay Time (Test Circuit 2)	tpHL	R_L=1.0k Ω, C_L=100pF		10		μs
H Transmission Delay Time (Test Circuit 2)	tpLH	R_L=1.0k Ω, C_L=100pF		15		μs
Output Current at on Time(I) (Test Circuit 1)	IoL(I)	V_{CC}=Vsmin.-0.05V,Tc=25℃	20			mA
Output Current at on Time (II) (Test Circuit 1)	IoL (II)	V_{CC}=Vsmin.-0.05V,Tc=-30~+75℃	16			mA

■ Test Circuit



Test Circuit 1



Test Circuit 2