
Absolute Maximum Ratings (T_A = 25°C)

Parameter	Symbol	Value	Unit
Supply Voltage	V _{CC}	16	V
Lead Temperature (soldering 10sec)	T _{LEAD}	300	°C
Power Dissipation	P _D	600	mW
Operating Temperature Range KA556	T _{OPR}	0 ~ + 70	°C
Storage Temperature Range	T _{STG}	- 65 ~ + 150	°C

Electrical Characteristics

(TA = 25°C, VCC = 5 ~ 15V, unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	VCC	-	4.5	-	16	V
Supply Current *1(two timers) (low state)	ICC	VCC = 5V, RL = ∞ VCC = 15V, RL = ∞	-	5 16	12 30	mA mA
Timing Error *2(monostable) Initial Accuracy Drift with Temperature Drift with Supply Voltage	ACCUR Δt/ΔT Δt/ΔVCC	RA = 2KΩ to 100KΩ C = 0.1μF T = 1.1RC	-	0.75 50 0.1	-	% ppm/°C %/V
Control Voltage	VC	VCC = 15V	9.0	10.0	11.0	V
		VCC = 5V	2.6	3.33	4.0	V
Threshold Voltage	VTH	VCC = 15V	8.8	10.0	11.2	V
		VCC = 5V	2.4	3.33	4.2	V
Threshold Current*3	ITH	-	-	30	250	nA
Trigger Voltage	VTR	VCC = 15V	4.5	5.0	5.6	V
		VCC = 5V	1.1	1.6	2.2	V
Trigger Current	ITR	VTR = 0V	-	0.01	2.0	μA
Reset Voltage*5	VRST	-	0.4	0.6	1.0	V
Reset Current	IRST	-	-	0.03	0.6	mA
Low Output Voltage	VOL	VCC = 15V ISINK = 10mA ISINK = 50mA ISINK = 100mA ISINK = 200mA VCC = 5V ISINK = 8mA ISINK = 5mA	-	0.1 0.4 2.0 2.5	0.25 0.75 3.2	V V
High Output Voltage	VOH	VCC = 15V ISOURCE = 200mA ISOURCE = 100mA VCC = 5V ISOURCE = 100mA	12.75	12.5 13.3	-	V V
Rise Time of Output	tR	-	-	100	300	ns
Fall Time of Output	tF	-	-	100	300	ns
Discharge Leakage Current	ILKG	-	-	10	100	nA
Matching Characteristics*4 Initial Accuracy Drift with Temperature Drift with Supply Voltage	ACCUR Δt/ΔT Δt/ΔVCC	-	-	1.0 10 0.2	2.0 - 0.5	% ppm/°C %/V
Timing Error (astable)*2 Initial Accuracy Drift with Temperature Drift with Supply Voltage	ACCUR Δt/ΔT Δt/ΔVCC	VCC = 15V RA, RB = 1KΩ to 100KΩ C = 0.1μF	-	2.25 150 0.3	-	% ppm/°C %/V

Notes:

*1. Supply current when output is high is typically 1.0mA less at VCC = 5V

*2. Tested at VCC = 5V and VCC = 15V

*3. This will determine the maximum value of RA + RB for 15V operation.

The maximum total R = 20MΩ, and for 5V operation the maximum total R = 6.6MΩ.

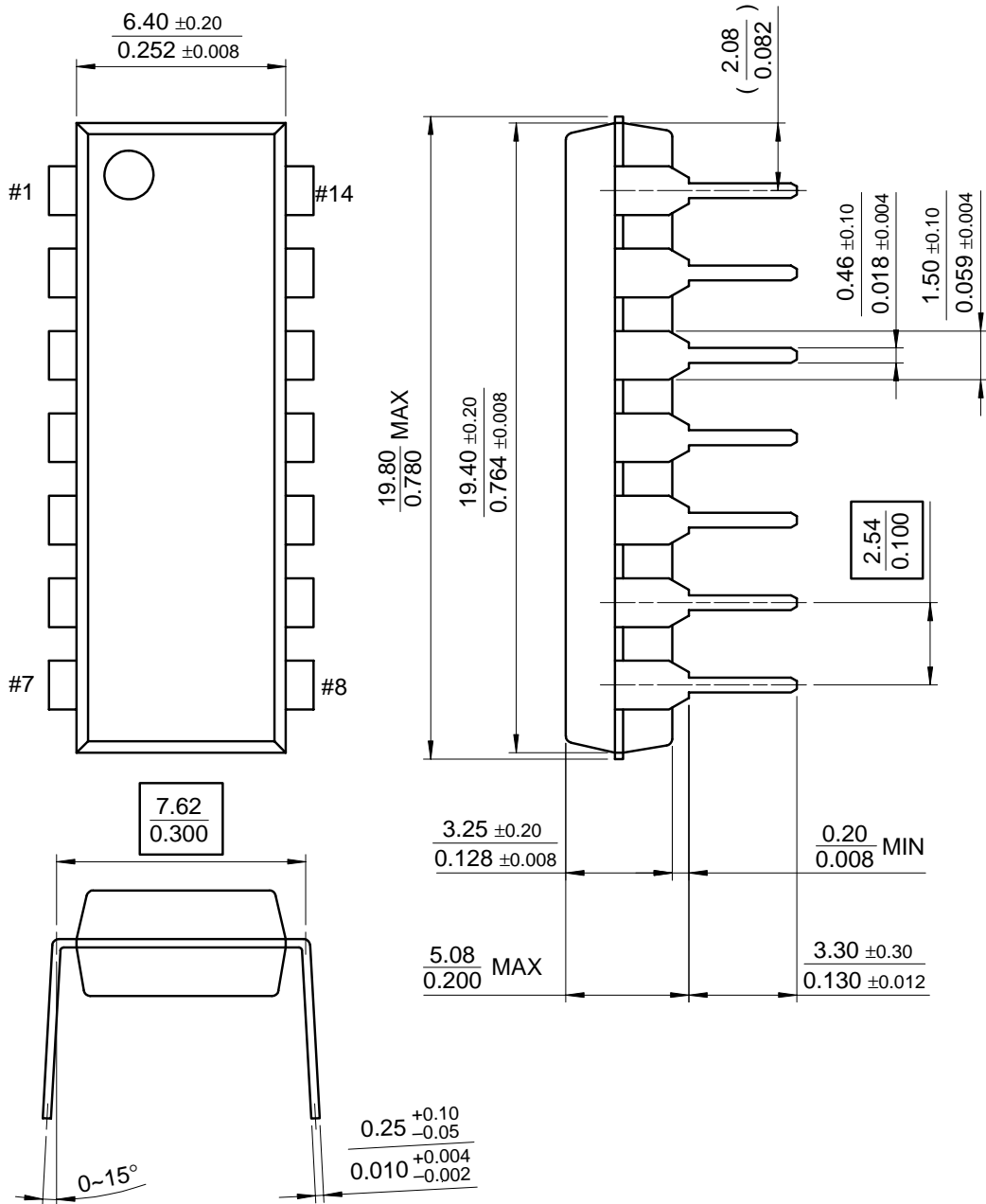
*4. Matching characteristics refer to the difference between performance characteristics of each timer section in the monostable mode.

*5. As reset voltage lowers, timing is inhibited and then the output goes low.

Mechanical Dimensions

Package

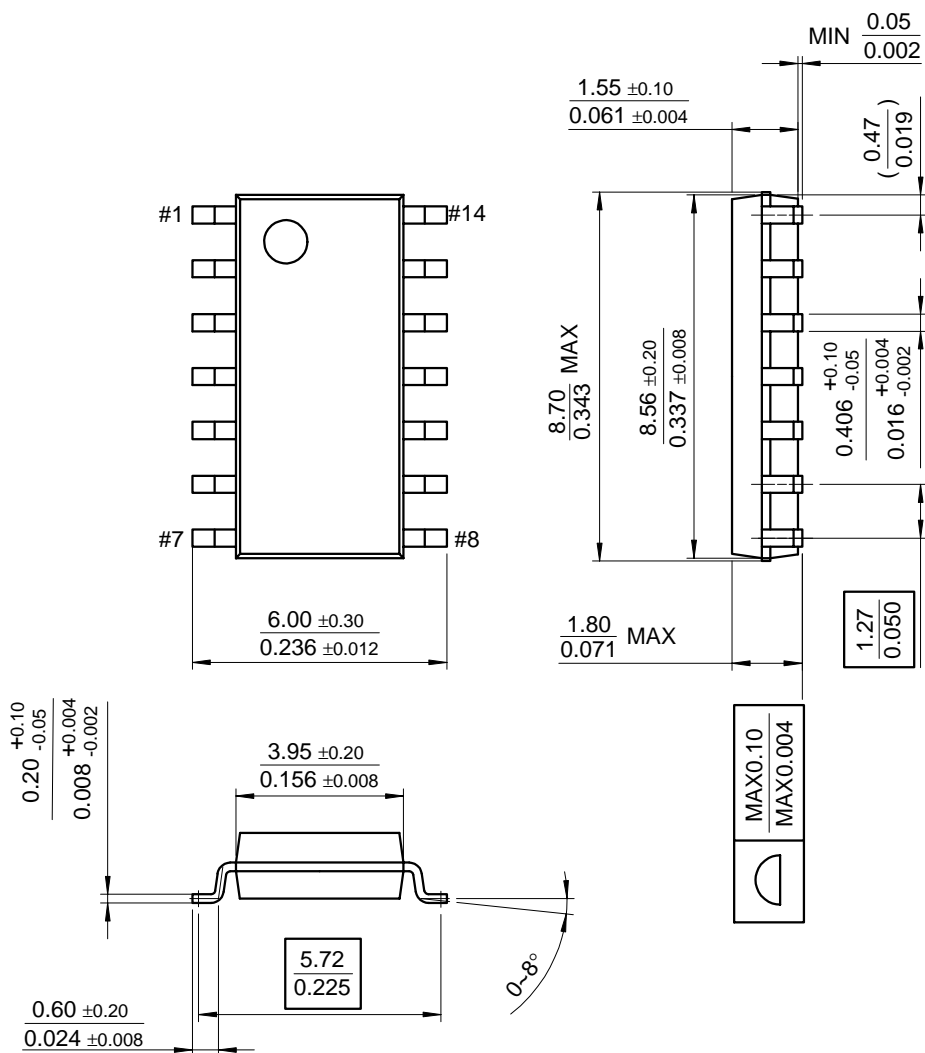
14-DIP



Mechanical Dimensions (Continued)

Package

14-SOP



Ordering Information

Product Number	Package	Operating Temperature
KA556	14-DIP	0 ~ + 70°C
KA556D	14-SOP	
KA556I	14-DIP	
KA556ID	14-SOP	

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