

555 ELECTRICAL CHARACTERISTICS TA = 25°C, VCC = +5V to +15 unless otherwise specified

PARAMETER	TEST CONDITIONS	SE 555			NE 555			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
Supply Voltage	VCC = 5V RL = ∞	4.5	3	18	4.5	3	16	V
Supply Current	VCC = 15V RL = ∞		10	5		6	15	mA
Timing Error (Monostable)	Low State, Note 1 RA = 2KΩ to 100 KΩ C = 0.1μF Note 2		0.5	2		1		%
Initial Accuracy			30	100		50		ppm/°C
Drift with Temperature			0.05	0.2		0.1		%/Volt
Drift with Supply Voltage	RA, RB = 2KΩ to 100 KΩ C = 0.1μF Note 2							%
Timing Error (Astable)								%
Initial Accuracy			1.5			2.25		%
Drift with Temperature			90			150		ppm/°C
Drift with Supply Voltage			0.15			0.3		%/Volt
Threshold Voltage	VCC = 15V	4.8	5	5.2		5		V
Trigger Voltage	VCC = 5V	1.45	1.67	1.9		1.67		V
Trigger Current			2.0			2.0		μA
Reset Voltage (Note 4)		0.4	0.7	1.0	0.4	0.7	1.0	V
Reset Current			0.1			0.1		mA
Threshold Current	Note 3		0.1	.25		0.1	.25	μA
Control Voltage Level	VCC = 15V	9.6	10	10.4	9	10	11	V
	VCC = 5V	2.9	3.33	3.8	2.6	3.33	4	V
Output Voltage (low)	VCC = 15V		0.1	0.15		0.1	.25	V
	ISINK = 10mA		0.4	0.5		0.4	.75	V
	ISINK = 50mA		2.0	2.2		2.0	2.5	V
	ISINK = 100mA		2.5			2.5		V
	ISINK = 200mA							V
	VCC = 5V		0.1	0.25				V
	ISINK = 8mA					.25	.35	V
	ISINK = 5mA							V
Output Voltage (High)	ISOURCE = 200mA		12.5			12.5		V
	VCC = 15V							V
	ISOURCE = 100mA	13.0	13.3		12.75	13.3		V
	VCC = 15V	3.0	3.3		2.75	3.3		V
	VCC = 5V							V
Time of Output			100			100		nsec
Time of Output			100			100		nsec
Charge Leakage Current			20	100		20	100	NA

Supply Current when output high typically 1mA less.  
at VCC = 5V and VCC = 15V

to determine the maximum value of RA + RBF for 15V operation, the max total R = 20 megohm, and for 5V operation, the max. total R = 6.8 megohm.  
tested with trigger input high.

ANALOG