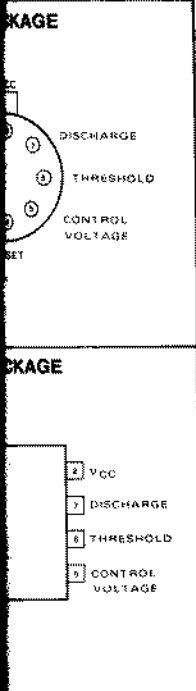


T, V-NE555-F, T, V

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		4.5		18	4.5		16	V
Supply Current	VCC = 5V RL = ∞ VCC = 15V RL = ∞		3 10	5 12		3 10	6 15	mA mA
Timing Error (Monostable)	Low State, Note 1 RA = 2KΩ to 100 KΩ C = 0.1μF Note 2		0.5 30	2 100		1 50		% ppm/°C
Initial Accuracy			0.05	0.2		0.1		%/Volt
Drift with Temperature								%
Drift with Supply Voltage						2.25		ppm/°C
Timing Error (Astable)	RA, RB = 2KΩ to 100 KΩ C = 0.1μF Note 2		1.5 90			150		ppm/°C
Initial Accuracy			0.15			0.3		%/Volt
Drift with Temperature			2/3			2/3		X VCC
Drift with Supply Voltage								V
Threshold Voltage								V
Trigger Voltage	VCC = 15V VCC = 5V	4.8 1.45	5 1.67	5.2 1.9		5 1.67		V 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		μA
Threshold Current	Note 3		0.1	.25		0.1	.25	μA
Control Voltage Level	VCC = 15V VCC = 5V	9.6 2.9	10 3.33	10.4 3.8	9 2.6	10 3.33	11 4	V V
Output Voltage (low)	VCC = 15V ISINK = 10mA ISINK = 50mA ISINK = 100mA ISINK = 200mA VCC = 5V ISINK = 8mA ISINK = 5mA		0.1 0.4 2.0 2.5	0.15 0.5 2.2		0.1 0.4 2.0 2.5	.25 .75 2.5	V V V V
Output Voltage (High)	ISOURCE = 200mA VCC = 15V ISOURCE = 100mA VCC = 15V VCC = 5V		12.5 3.3			12.5 3.3		V V
Rise Time of Output			100			100		nsec
Fall Time of Output			100			100		nsec
Discharge Leakage Current			20	100		20	100	NA

NOTES  
 1 Supply Current when output high typically 1mA less.  
 2 Tested at VCC = 5V and VCC = 15V  
 3 This will determine the maximum value of RA + RB for 15V operation, the max total R = 20 megohm, and for 5V operation, the max. total R = 6.8 megohm.  
 4 Specified with trigger input high.

ANALOG

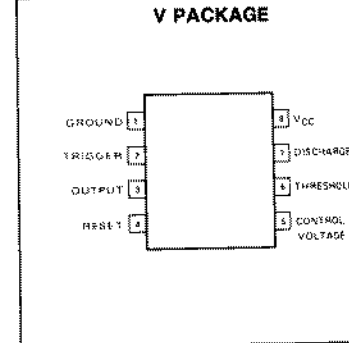
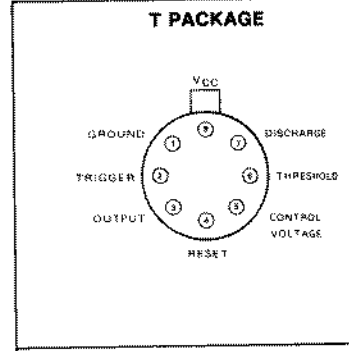
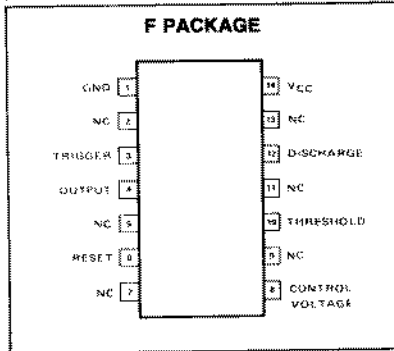
**FEATURES**

- TIMING FROM MICROSECONDS THROUGH HOURS
- OPERATES IN BOTH ASTABLE AND MONOSTABLE MODES
- ADJUSTABLE DUTY CYCLE
- HIGH CURRENT OUTPUT CAN SOURCE OR SINK 200mA
- OUTPUT CAN DRIVE TTL
- TEMPERATURE STABILITY OF 0.005% PER °C
- NORMALLY ON AND NORMALLY OFF OUTPUT

**APPLICATIONS**

- PRECISION TIMING
- PULSE GENERATION
- SEQUENTIAL TIMING
- TIME DELAY GENERATION
- PULSE WIDTH MODULATION
- PULSE POSITION MODULATION
- MISSING PULSE DETECTOR

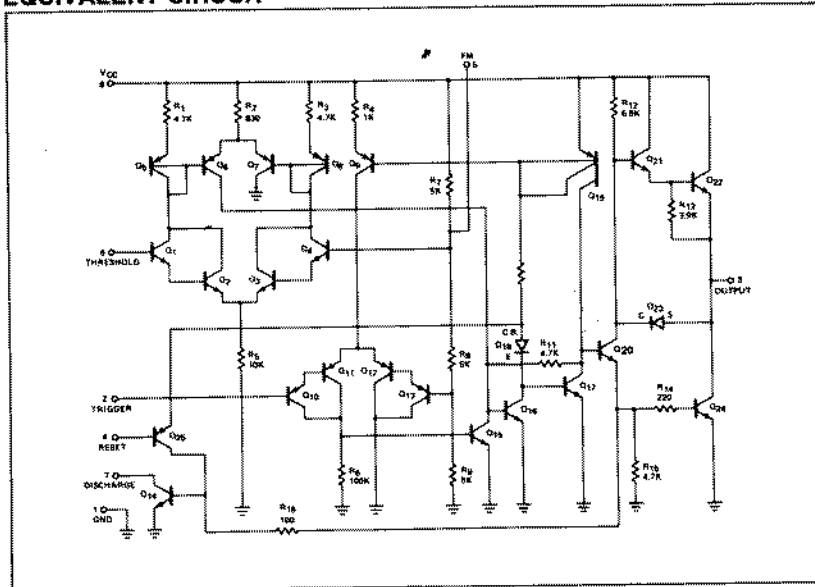
**PIN CONFIGURATION**



**ABSOLUTE MAXIMUM RATINGS**

Supply Voltage	+18V
SE555	+16V
NE555	+16V
Power Dissipation	600 mW
Operating Temperature Range	0°C to +70°C
NE555	-55°C to +125°C
SE555	-55°C to +125°C
Storage Temperature Range	-65°C to +150°C
Lead Temperature (Soldering, 60 seconds)	+300°C

**EQUIVALENT CIRCUIT**



**ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITIONS
Supply Voltage	
Supply Current	
Timing Error (Monostable)	
Initial Accuracy	
Drift with Temperature	
Drift with Supply Voltage	
Timing Error (Astable)	
Initial Accuracy	
Drift with Temperature	
Drift with Supply Voltage	
Threshold Voltage	
Threshold Current	
Trigger Voltage	
Trigger Current	
Reset Voltage (Normally On)	
Reset Current	
Threshold Current	
Control Voltage	
Output Voltage (Normally On)	
Output Voltage (Normally Off)	
Rise Time of Output	
Fall Time of Output	
Discharge Leakage Current	

- NOTES**
1. Supply Current when timing network is discharged.
  2. Tested at VCC = 5V.
  3. This will determine the timing error.
  4. Specified with trigger pulse width = 100ns.