

Signetics

Integrated Circuits – Timers

NE555 Series Timers

GENERAL DESCRIPTION

The NE/SE 555 monolithic timing circuit is a highly stable controller capable of producing accurate time delays, or oscillation. Additional terminals are provided for triggering or resetting if desired. In the time delay mode of operation, the time is precisely controlled by one external resistor and capacitor. For a stable operation as an oscillator, the free running frequency and the duty cycle are both accurately controlled with two external resistors and one capacitor. The circuit may be triggered and reset on falling waveforms, and the output structure can source or sink up to 200mA, or drive TTL circuits.

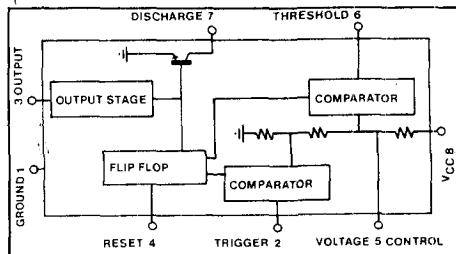
FEATURES

- Turn off time less than 2 μ s
- Maximum operating frequency greater than 500kHz
- Timing from microseconds to hours
- Operates in both astable and monostable modes
- High output current
- Adjustable duty cycle
- TTL compatible
- Temperature stability of 0.005% per $^{\circ}$ C
- SE555 Mil std 883A, B, C available M38510 (JAN) approved, M38510 processing available.

APPLICATIONS

- Precision timing
- Pulse generation
- Sequential timing
- Time delay generation
- Pulse width modulation
- Pulse position modulation
- Missing pulse detector

BLOCK DIAGRAM

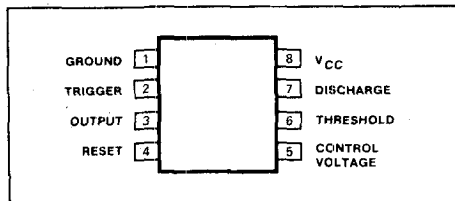


MAXIMUM RATINGS

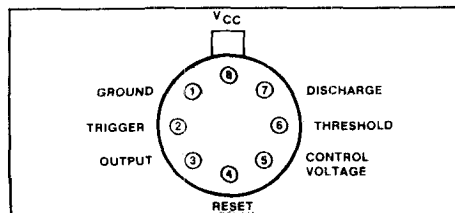
PARAMETER	RATING	UNIT
Supply voltage		
SE555	+18	V
NE555, SE555C, SA555	+16	V
Power dissipation	600	mW
Operating temperature range		
NE555	0 to +70	$^{\circ}$ C
SA555	-40 to +85	$^{\circ}$ C
SE555, SE555C	-55 to +125	$^{\circ}$ C
Storage temperature range	-65 to +150	$^{\circ}$ C
Load temperature (soldering, 60sec)	300	$^{\circ}$ C

CONNECTION DIAGRAM

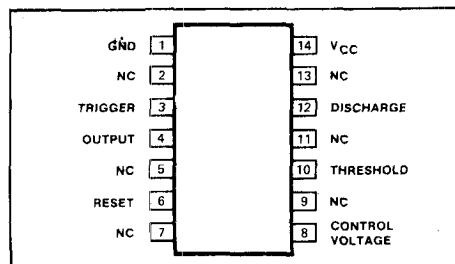
N PACKAGE



T PACKAGE



F,N-14 PACKAGE



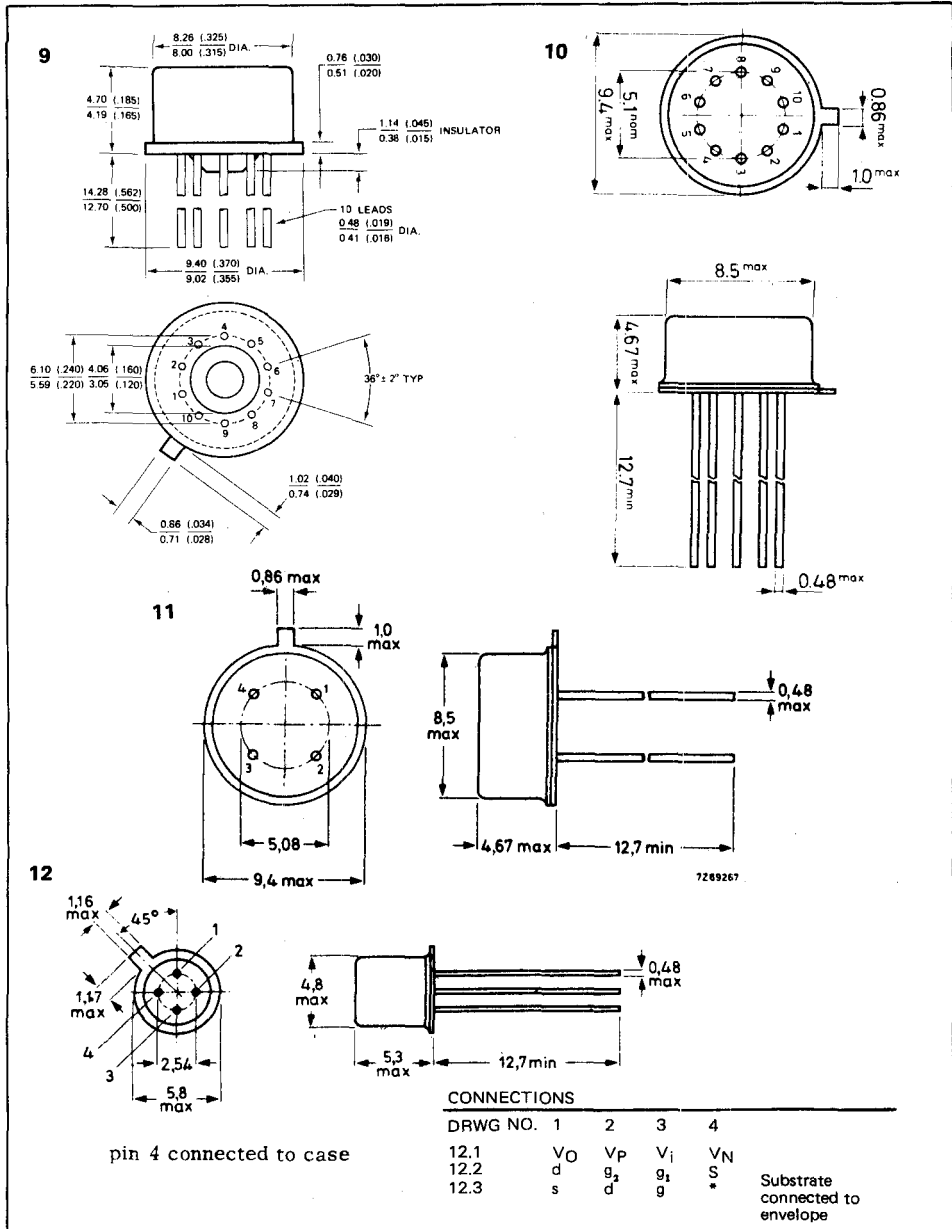
TYPE NO.	STOCK NO.	OUTLINE DRAWG. NO.
NE555F	56028F	1
NE555N	56029D	8
NE555T	56030G	7
SE555F	56031E	1
SE555N	56032C	8
SE555T	56033A	7

ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644

Outline Drawings

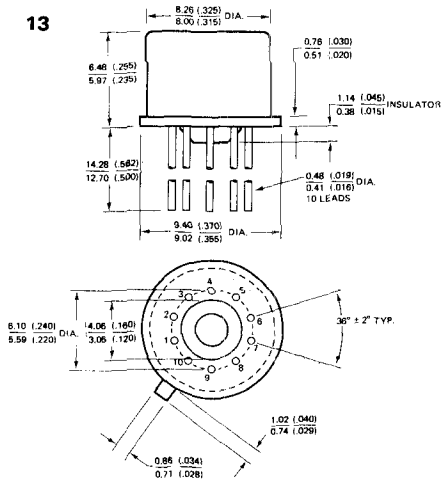




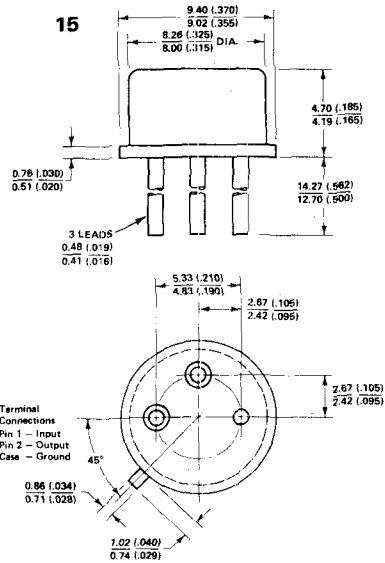
PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

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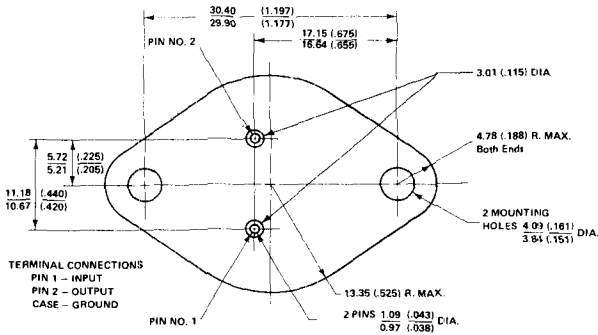
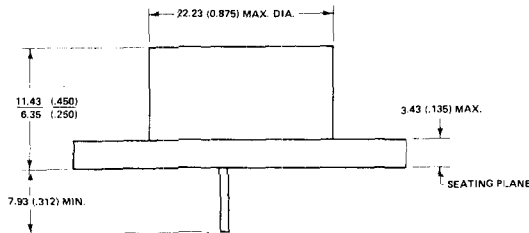
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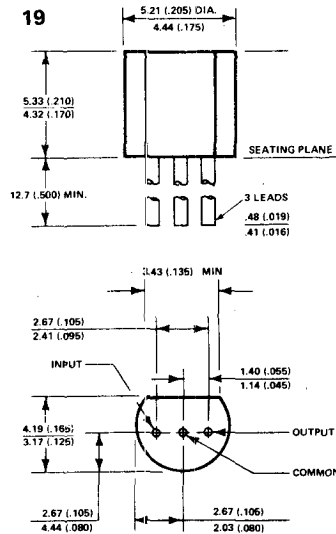
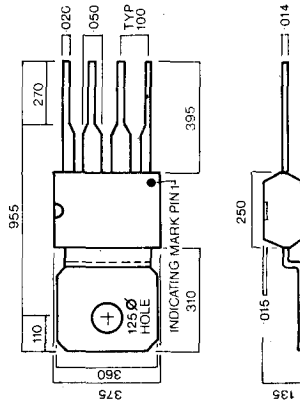
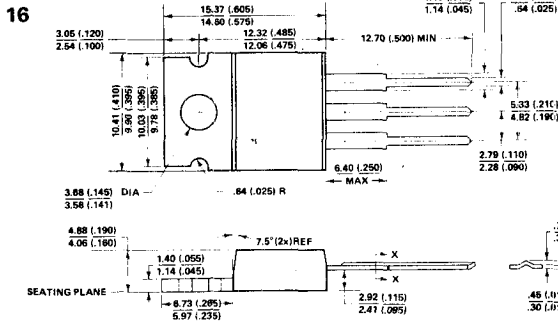


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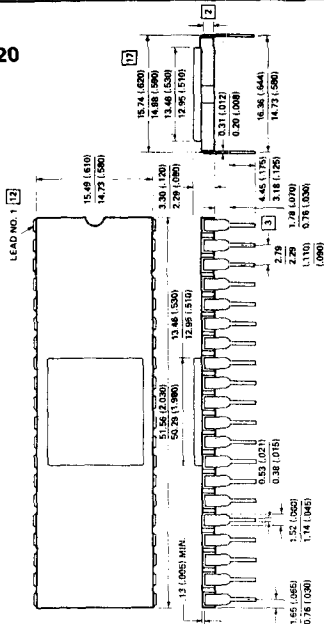




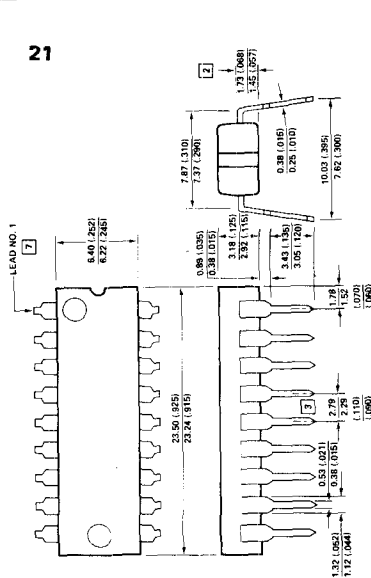
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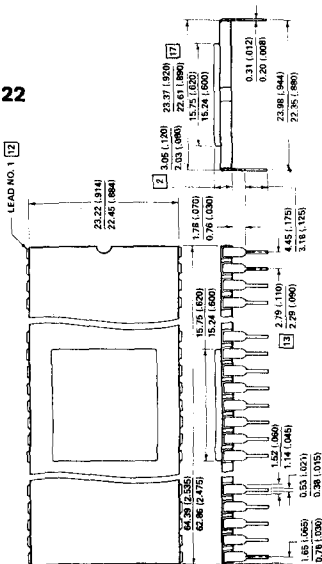
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