General Specifications

TI-544-01

GS48C44Z01-00E-N

Fail-Safe Timer Module

■ GENERAL

This module contains a single channel fail-safe delay-off Timer circuit.

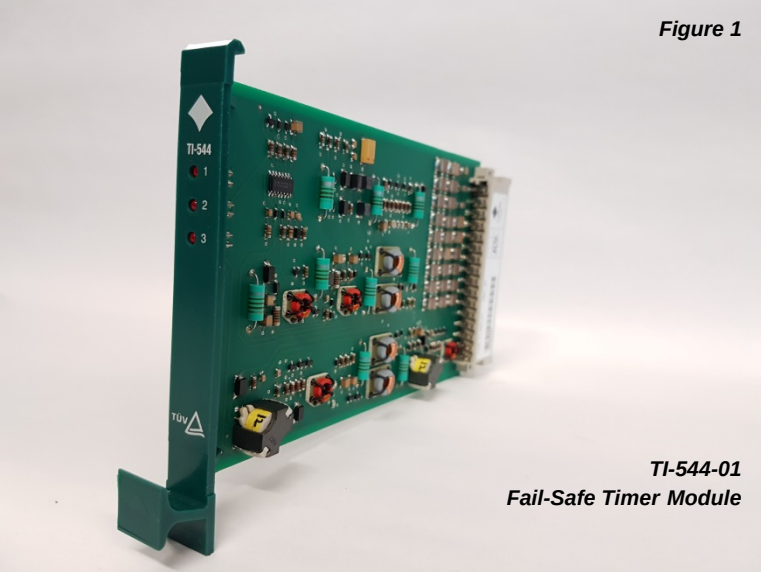

Figure 1

TI-544-01
Fail-Safe Timer Module

Timer setting is done by connector strapping. The timer is suitable for a timer range of 1.5 – 310 sec. The delay function is based on the controlled discharge of a capacitor.

The input signal is used to generate a pulse of approximately 1 second which fully charges the capacitor(s).

Depending on the time strapping, one or more capacitors are used. As long as the input signal is present, the capacitors remain charged. When the input signal is removed, the capacitors discharge over a resistor network. When the capacitors are discharged, the output will no longer generate pulses.
The module is provided with 3 LEDs indicating: input, output and running of the timer.

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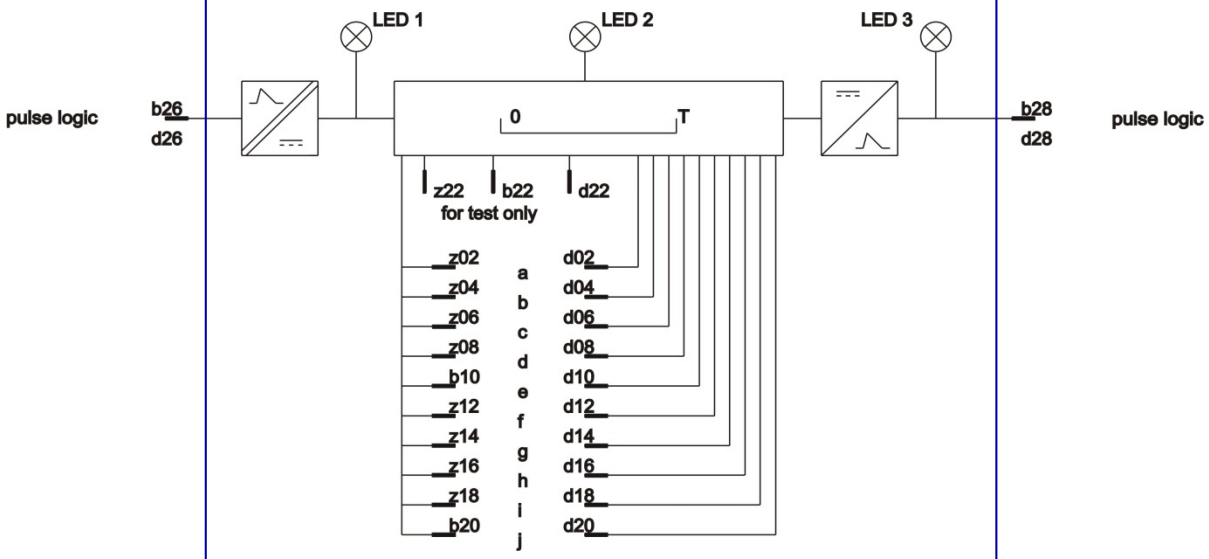
■ FUNCTIONAL DIAGRAM

Inputs	Module	Outputs



Supply		Notes	Front	
z32	not used	The output LEDs 3 represents the output current.	1	input circuit
z30	not used		2	timer running
b32	20 Vdc logic		3	output circuit
d32	0 Vdc logic		4	
d30	A voltage pulse		5	
b30	B voltage pulse		6	
			7	
			8	

■ SPECIFICATIONS

Description		Data
General	Number of channels	1
	Width	3HP
	Identification	TI-544 on front and more detailed on connector label
	Weight	135 gram
Input	Pulse Logic Unit Load Status indication Minimum trigger time	Current pulses 500 mA 1 Red LED 1 msec.
Output	Output type Capacity Status indication	Current pulses 500 mA 10 unit loads Red LED
	Running indication	Red LED (blinking)
	Timing errors: Capacitor Tolerance Circuit tolerance Temperature tolerance	 10% 5% 7% (full range)
Propagation	On delay	4 - 10 ms
Supply	Logic supply	20 Vdc 15 mA
	Clock	A and B pulse, level 0 / 20 V
Dissipation		< 0.3 W

■ Time Strapping

Connections

a: z02 - d02
b: z04 - d04
c: z06 - d06
d: z08 - d08
e: b10 - d10
f: z12 - d12
g: z14 - d14
h: z16 - d16
i: z18 - d18
j: b20 - d20

Time settings

seconds	
1.5	
3	a
4.5	b
6	ab
7.5	d
9	a d
10	b d
12	ab d
15	a f
20	d f
25	ab d f
30	g
35	ab g
40	b d g
45	a fg
50	a d fg
55	defg
60	bcdefg
70	abc h
80	ab f h
90	b def h
100	a d gh
110	d fgh
120	b defgh
130	bc j
140	b f j
150	a def j
160	d g j
170	ab fg j
180	a defg j
190	ab h j
200	a f h j
220	ab gh j
240	defgh j
260	f hij
280	b ghij
300	bcd fghij
310	abcdefghij