

Solid State Timers and Controllers



4382

Dual Supply Interval Timing Module

The model 4382 is an all solid state timer that offers interval timing operation. Intended for service in locomotive and transit car applications, the model 4382 offers excellent transient protection and provides for reliable timing control. The model 4382 is capable of controlling DC loads to 1 ampere at voltages up to 100V DC. Application of the operating voltage supply 'B' turns on the remote load circuit connected in supply 'A' and starts the timing period At the end of the preset timing period, the remote load circuit turns off. Should the supply 'B' voltage be removed for 100 milliseconds, or longer, during the timing period, the timing period will reset and start again when supply 'B' voltage is re-applied. The model 4382 is available in fixed timing intervals from 1 second to 24 hours.

Mechanical & Wiring



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Specifications			
	Operating	Voltage Supply "A":	50V - 100V DC (74V nominal).
	Operating	Voltage Supply "B":	50V - 100V DC (74V nominal).
	Voltage	"A" & "B" Isolation:	Voltages "A" & "B" are isolated from each other up to 1000V AC/DC.
			Initiate voltage supply "B" is optically coupled to timer logic and output
			circuit connected to supply "A."
	Voltage C	Control Relationship:	Voltage "A" is the supply voltage for the internal output switch and the
			load circuit. When the output is energized, voltage "A" can be removed
			and re-applied and not effect the timing period, only the output load
			interval. Voltage "A" has no effect on the output switch and cannot
			retrigger another timing cycle with the load turning back on. Voltage "B"
			is the supply voltage that actually controls the timing period and the drive
		1	to the optically coupled output switch. Removing voltage "B" will cause
		t	the timing circuit to reset to the full timing period, and when voltage "B"
		i	is re-applied, the timing cycle will begin again.
		Operating Current:	Less than 25 mA on supply 'B', 20 mA plus load current on supply 'A.'.
		liming Mode:	Interval.
	Purchase To	Fixed Timing:	1 Second to 86,400 Seconds (24 Hours). $\pm 10\%$
	i urchase re	Timing Variation:	\pm 10%.
	Repeatabil	ity Of Timing Period:	$\pm 2\%$ nominal.
	-	Recycle Time:	100 milliseconds maximum.
		Output:	Solid state switch normally open.
		Output Rating:	Rated for 5mA to 1A inductive with inrush current to 15A for 8mS.
		Load Connection:	External load must be connected to terminal #6 and the negative side of
		1	the 74V of supply "A", and terminal #7 connected to the positive side of the 74V of supply "A".
Voltage Drop Across Solid State			
Output Switch During Energize Time:			2 volts maximum.
Leakage Current Through Solid State			
Output Switch When Output			
Is Not Energized:			1 mA maximum.
Transient Protection:		Fransient Protection:	Protected by silicon transient suppressors responding to transients
			within 1 x 10 ⁻¹² seconds to a peak pulse power dissipation of 1500
			to 1/120 second at 25°C. Maximum transient voltage protection is 6000
			volts as delivered through a source resistance of 30 ohms with a
			maximum duration of 8.3ms.
Dielectric: 1			1500V rms all terminals to case.
Operating Temperature: -40°C to +85°C			-40°C to +85°C
Construction: Encapsulated module with .25 quick connect tab type terminals.			
Data Sheet Revision Date: August 21, 1995			
Ordering Information			
	Part Number	Interval Timing Period	Examples:
	1393	Specify Time In	4382 - 1: this model is fixed at 1 seconds.
	4302 -	1 To 86,400	4382 - 50: this model is fixed at 50 seconds.

4382 - 3600: this model is fixed at 3600 seconds (1 Hour).