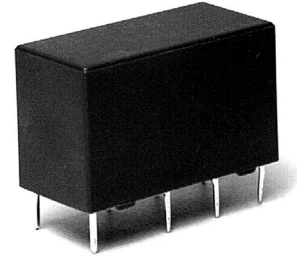


# Greenwich Electronics, Inc.

## LS3 Series

- DPDT (2 form C) carries to 5A
- Single and dual coil latching
- Gold flashed contacts
- Long operation life
- Applications: Telecommunications, test equipment



### COIL DATA

#### LS3 (Single Side Stable):

Nominal Voltage (DC)	Nominal Coil Current (mA) (± 10% at 20°C)		Coil Resistance (Ω) (± 10% at 20°C)	
	Std coil	Sensitive coil (H)	Std coil	Sensitive coil (H)
5	40	30	125	167
6	33	25	180	240
9	22	17	405	540
12	17	13	720	960
15	13	10	1125	1500
24	8	6	2880	3840
48	4	---	11520	-----

Pick-up Voltage	<b>Std:</b> ≤70% nominal, <b>H:</b> ≤80% nominal
Drop-out Voltage	<b>Std/H:</b> ≤10% nominal
Max. Coil Voltage	<b>Std:</b> 200% nominal, <b>H:</b> 230% nominal
Coil Consumption	<b>Std:</b> Approx. 0.2W, <b>H:</b> Approx. 0.15W

#### LS3-1L (Single latching coil):

Nominal Voltage (DC)	Nominal Coil Current (mA) (± 10% at 20°C)		Coil Resistance (Ω) (± 10% at 20°C)	
	Std coil	Sensitive coil (H)	Std coil	Sensitive coil (H)
5	20	15	250	330
6	17	13	360	480
9	11	8	810	1080
12	8	6	1440	1920
15	7	5	2220	3000
24	6	3	4000	7680

Set / Reset Voltage	<b>Std:</b> ≤75% nominal, <b>H:</b> ≤80% nominal
Max. Coil Voltage	<b>Std:</b> 280% nom. (230% for 24VDC), <b>H:</b> 320% nom.
Coil Consumption	<b>Std:</b> ~ 0.1W, <b>H:</b> ~ 0.075W

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## LS3-2L (Dual latching Coils):

Nominal Voltage (DC)	Nominal Coil Current (mA) (± 10% at 20°C)		Coil Resistance (Ω) (± 10% at 20°C)	
	Std coil	Sensitive coil (H)	Std coil	Sensitive coil (H)
5	40	30	125	167
6	33	25	180	240
9	22	17	405	540
12	17	13	720	960
15	13	10	1125	1500
24	12	6	2040	3840

Set / Reset Voltage	<b>Std:</b> ≤75% nominal, <b>H:</b> ≤80% nominal
Max. Coil Voltage	<b>Std:</b> 200% nominal, <b>H:</b> 230% nominal
Coil Consumption	<b>Std:</b> Approx. 0.2W, <b>H:</b> Approx. 0.15W

## Contact

Configuration	<b>2C:</b> 2 form C (DPDT)
Material	Silver (Ag) alloy, Gold (Au) clad
Rated Load	2A@30VDC, 1A@125VAC
Max. Carry Current	5A
Max. Switching Voltage	220VDC / 250VAC
Max. Switching Current	2A
Max. Switching Power	60W / 125VA

## CHARACTERISTICS

Contact Resistance	Max. 50mΩ
Operate Time	≤4ms
Release Time	≤3ms
Bounce Time	1.5ms
Set / reset Time	3ms
Insulation Resistance	1000MΩ (@500VDC)
Dielectric Strength:	
• Between coil and contacts	1500VRMS - one minute (single side stable only) 1000VRMS - one minute (single and dual coil latch only)
• Between open contacts	1000VRMS - one minute
• Between contact sets	1500VRMS - one minute
Vibration Resistance	20g, 10-55Hz

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Shock Resistance	50g (functional)
Ambient Temperature	
• Operate	-40°C to +85°C
• Storage	-40°C to +125°C
Relative Humidity	5% - 85%
Life Expectancy:	
• Mechanical	1 x 10 <sup>8</sup>
• Electrical	1 x 10 <sup>5</sup> (2A@30VDC), 5 x 10 <sup>5</sup> (1A@30VDC)
Weight	Approx. 8 grams

## ORDERING INFORMATION

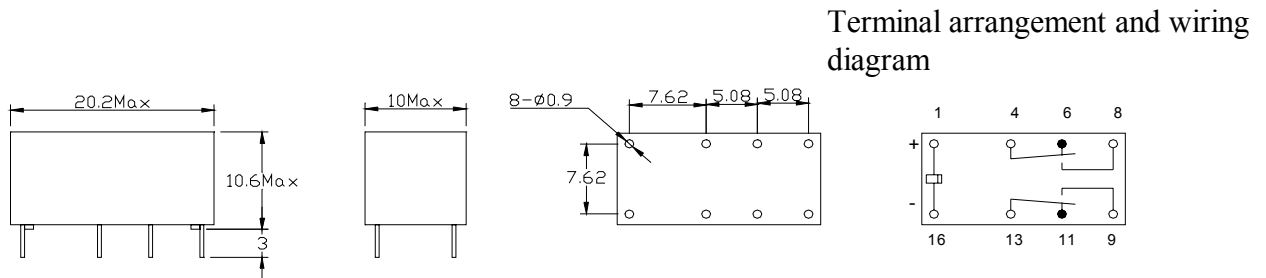
LS3 - XXX - H 1L S  
I II III IV V

I. Series	<b>LS3</b>
II. Coil Voltage (VDC)	<b>005, 006, 009, 012, 015, 024, 048</b>
III. Coil Sensitivity	<b>nil</b> - Standard, <b>H</b> - High Sensitivity
IV. Coil Type	<b>nil</b> - Single side stable, <b>1L</b> - Single latching coil, <b>2L</b> - Dual latching coils
V. Package Type	<b>S</b> - Sealed

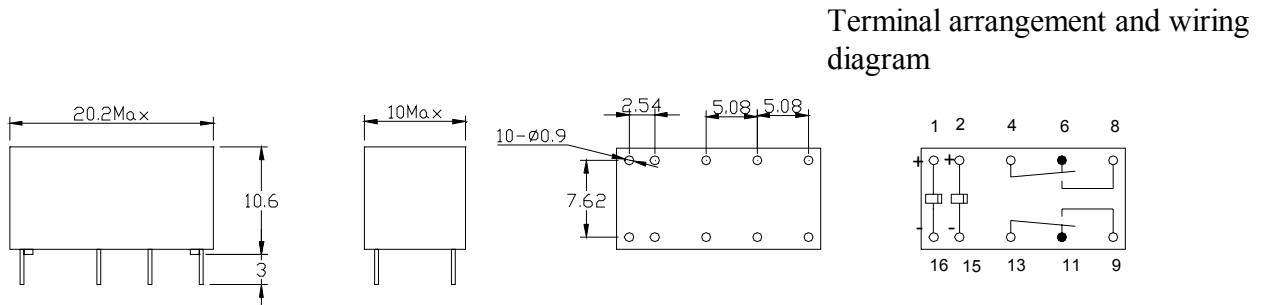
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## LS3 Series Dimensions and Schematics (in mm)

### LS3 – Single side stable and single coil latching (1L) styles



### LS3 – Dual coil latching (2L) style



Latching options are shown in “reset” mode. For single coil latch, energize pins 1 and 16 to “set”, reverse current to “reset”. For dual coil latch, energize pins 1 and 16 to “set”, energize pins 2 and 15 to “reset”.