

13.2×12×9.8



- 30A 13.5VDC switching rating
- 40A inrush at 13.5VDC
- Smallest power relay
- 1 Form A and 1 Form C arrangements in single and dual relay packages
- For Automotive Applications
- Conform to RoHS,ELV directive

### CHARACTERISTICS DATA

Insulation Resistance	100MΩ Min at 500VDC
Between Open Contacts	500VAC(for one minute)
Between Contacts and Coil	500VAC(for one minute)
Operate Time	4ms
Release Time	2ms
Temperature Range	-40°C to +105°C
Shock Resistance	6 msec up to 30g (No change in the switching state > 10 μ sec)
Vibration Resistance	10-500Hz, 6g (No change in the switching state > 10 μ sec)
Max. switching frequency	Mechanical: 18,000 operations/hr
Humidity	20-50%
Weight	Approx 4g

### CONTACT DATA

Contact Form	1H/1Z
Contact Material	Silver Alloy
Load	Resistive load(COS Φ=1) Cut 13.5VDC
Minimum load	0.5A 12VDC
Max Switching Current	40A
Max Switching Power	420W
Contact Resistance	100mΩ Max at 6VDC 1A
Electrical	See "Contact Data" Table
Mechanical	10,000,000 Operations(at 300 Operations/minute)

### COIL DATA

at 20°C

Coil Power 0.57W

Nominal Voltage (VDC)	Rated Current (mA)	Max Operate Voltage (VDC)	Min Release Voltage (VDC)	Coil Resistance (Ω ± 10%)
6	95	3.45	0.6	63
12	47.5	6.9	1.2	254
24	23.7	13.8	2.4	1010

Coil Power 0.8W

Nominal Voltage (VDC)	Rated Current (mA)	Max Operate Voltage (VDC)	Min Release Voltage (VDC)	Coil Resistance (Ω ± 10%)
6	133.3	3.45	0.6	45
12	66.7	6.9	1.2	180
24	33.3	13.8	2.4	720

### ORDERING CODE

FLS	D	S	H	/	12VDC
1	2	3	4	5	
1. Relay Model					
2. Coil Power					
D=0.8W, L=0.57W					
3. S: Sealed					
Nil: Vented(Flux-tight)					
4. Contact Form					
H: Form 1A, Z: Form 1C					
5. Coil Nominal Voltage					
6, 12, 24VDC					

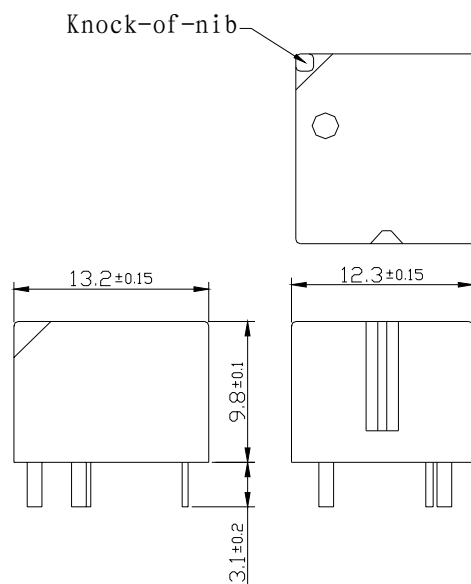


## CONTACT RATINGS

	Load Type	Contact Current (A)		Frequency ops/min	Duty Cycle	Life Expectancy	
		NO	NC				
Contact Ratings	Resistive Load	20	---	15	0.5	$3 \times 10^5$	
	Wiper reserve L=1.0mH	Make	25	25	15	0.5	$3 \times 10^5$
		Break	5	5			
	Motor reserve blocked L=0.77mH	20A Inrush		15	0.5	$1 \times 10^5$	
	Flasher Load		$3 \times 21W$	---	80	0.5	$2 \times 10^6$
	Lamp	Inrush	100	---	6	1/6	$1 \times 10^5$
Steady state		10	---				

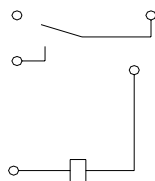
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND LAYOUT

### Outline Dimensions-Single Relay

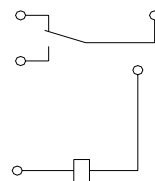


### Wiring Diagrams-Single Relay(Bottom Views)

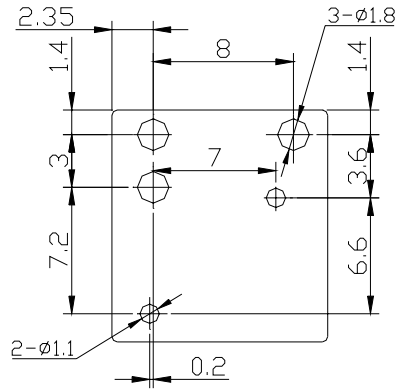
1 Form A



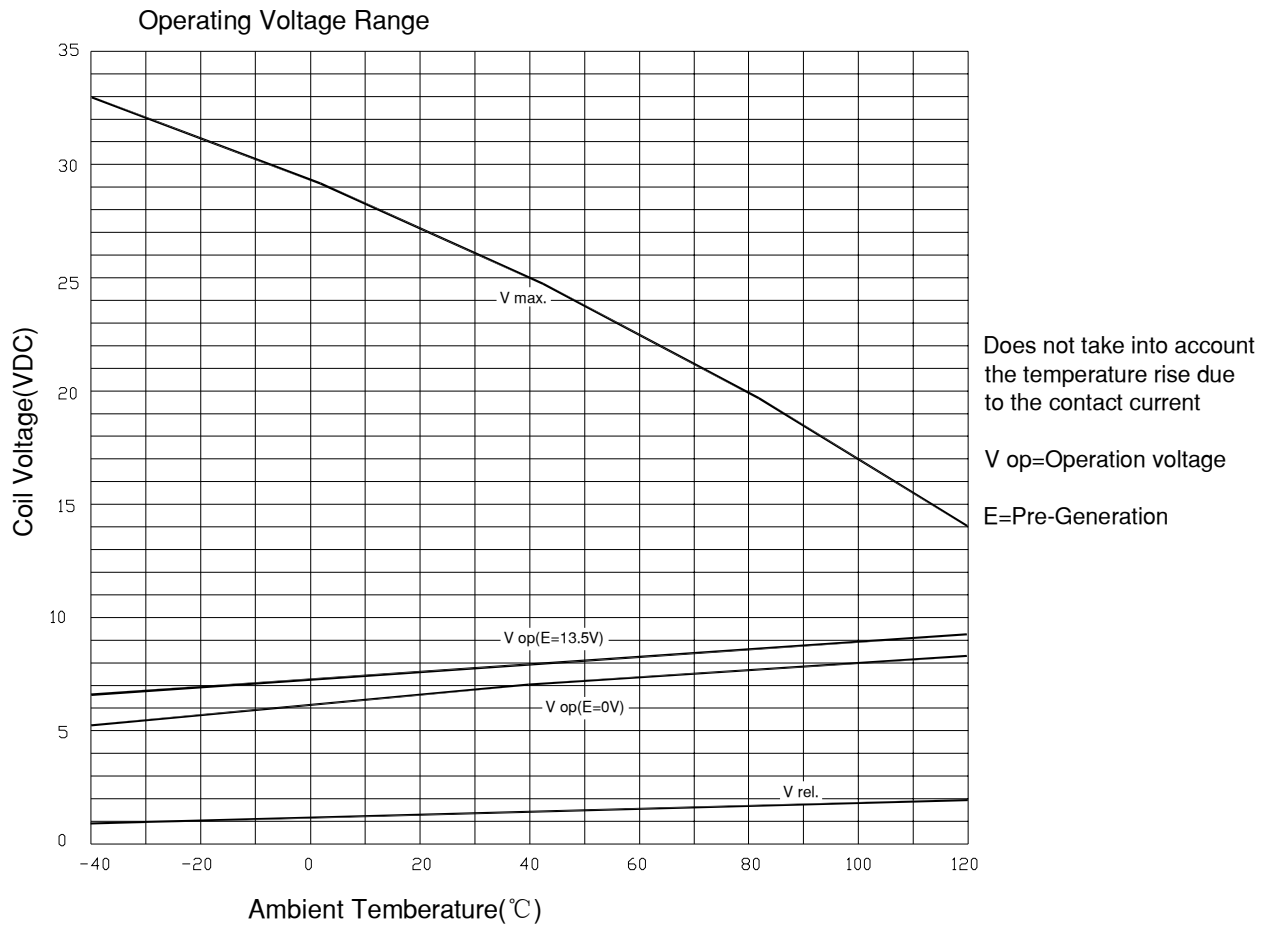
1 Form C



### Suggested PC Board Layout-Single Relay(Bottom View)



### ENGINEERING DATA



FLOURISHING RELAY

The specifications are for the customer's reference and are subject to change without notice.