FL-3FF   PC Board Relay

$_c$**ᴿᵁ**$_{us}$**E** E332369

19.2×15.5×15.5

- ●10A switching capability
- ● Small footprint
- ● Sealed type available
- ●Class B/F available
- ● Conform to RoHS,ELV directive

CONTACT DATA

Contact Form	1H/1Z
Contact Material	Silver Alloy
Load	Resistive load(COSΦ=1)
Contact Ratings	1H:10A 240VAC 12A 120VAC 1Z: 7A 240VAC 10A 120VAC
Minimum load	100mA 5VDC
Max Switching Voltage	250VAC/30VDC
Max Switching Current	15A
Max Switching Power	2770VA/240W
Contact Resistance	100mΩMax at 6VDC 1A
Electrical	100, 000 Operations(at30Operations/minute)
Mechanical	10, 000, 000 Operations(at300Operations/minute)

CHARACTERISTICS DATA

Insulation Resistance	100MΩMin at 500VDC
Between Open Contacts	750VAC(50/60Hz for one minute)
Between Contacts and Coil	1500VAC(50/60Hz for one minute)
Operate Time	10ms
Release Time	5ms
Temperature Range	-40℃to+85℃
Shock Resistance	Operating Extremes: 10G
	Damage Limits: 100G
Vibration Resistance	10-55Hz, 1.5mm
Max. switching frequency	Mechanical: 18,000 operations/hr
	Electrical: 1,800 operations/hr
Humidity	40-85%
Weight	Approx 10g

COIL DATA   at 20℃

Coil Power 0.36W

Nominal Voltage (VDC)	Rated Current (mA)	Max Operate Voltage (VDC)	Min Release Voltage (VDC)	Coil Resistance (Ω±10%)
3	120	2.25	0.15	25
5	71.4	3.75	0.25	69
6	60	4.5	0.3	100
9	40	6.75	0.45	225
12	30	9	0.6	400
18	20	13.5	0.9	900
24	15	18	1.2	1600
48	7.5	36	2.4	6400

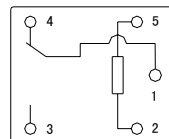## APPROVED STANDARDS

UL & cUL	1H:10A 240VAC 12A 120VAC 1Z: 7A 240VAC 10A 120VAC

OPDERING CODE

FL-3FF—	S —	H	F	（TBF-1）	/ 12VDC
1	2	3	4	5	6

1. Relay Model
2. Sealed
3. Contact Form
   H: Form A
   Z: Form C
4. Temperature Range
   F: UL 105℃
   Nil: UL 85℃
5. Insulated Level
   TBF-1: Class F
   Nil: Standard
6. Coil Nominal Voltage
   3,5,6,9,12,18,24,48VDC

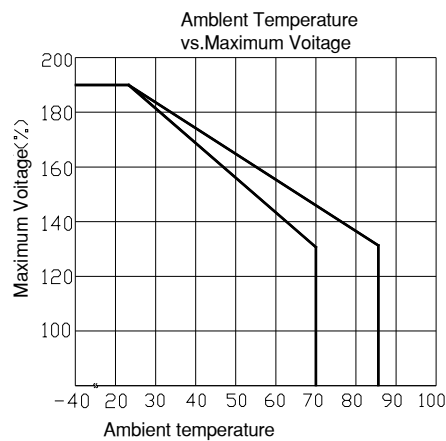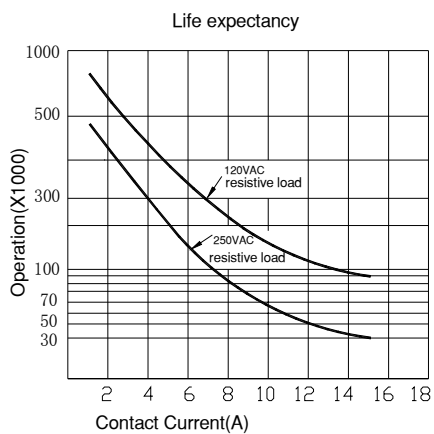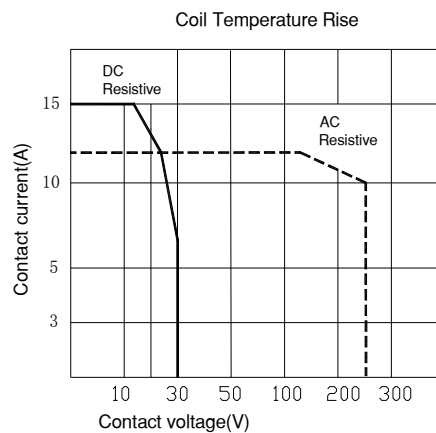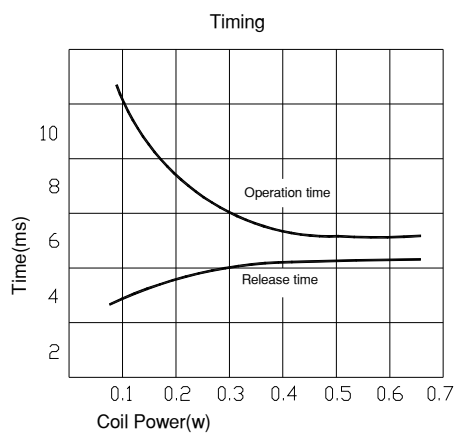## OUTLINE DIMENSIONS, WIRING DIAGRAM AND LAYOUT

15.5 max.
0.4   1.1   0.4
15.4±0.5
4.5±0.3

0.3
□0.5   1
19±0.5

4-∅1.3
∅1.4
12
12.2   2.0
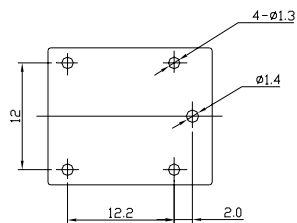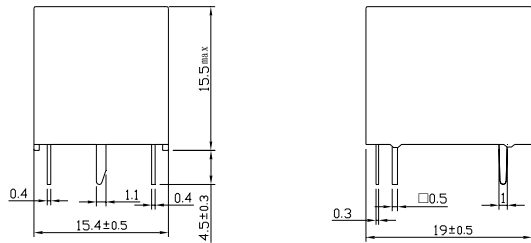
Form C
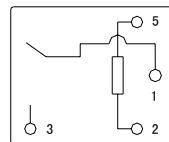
Form A

Layout (Bottom View)

ENGINEERING DATA

Timing

Time(ms)

Operation time

Release time

Coil Power(w)

Coil Temperature Rise

DC
Resistive

AC
Resistive

Contact current(A)

Contact voltage(V)

Life expectancy

Operation(X1000)

120VAC
resistive load

250VAC
resistive load

Contact Current(A)

Amblent Temperature
vs.Maximum Voltage

Maximum Voltage(%)

Ambient temperature

FLOURISHING RELAY

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