

MAIN FEATURE

1. Low power consumption; AC/DC coil available.
2. Proper insulation distance with 5,000VAC dielectric strength.
3. UL Class F insulation available.
4. In accordance with IEC 60335-1 and IEC 60730-1.
5. Halogen Free series available.
6. Comply with RoHS and REACH regulations

CONTACT RATING

| Load Type | EMI (AM/AB) | EMI (A) | EMI (FM/FB) | EMI (F) |
|----------------------------|-------------|-----------|-----------------|-----------------|
| Rated Load (Resistive) | 8A 250VAC | 8A 250VAC | 8A 250VAC | 8A 250VAC |
| | 8A 30VDC | 8A 30VDC | 8A 30VDC | 8A 30VDC |
| Contact Capacity | - | - | 1/2HP 250VAC | 1/2HP 250VAC |
| | - | - | Pilot Duty R300 | Pilot Duty R300 |
| Rated Carrying Current | 8A | 8A | 8A | 8A |
| Max. Allowable Voltage | AC 250V | AC 250V | AC 250V | AC 250V |
| | DC 300V | DC 300V | DC 300V | DC 300V |
| Max. Allowable Current | 8A | 8A | 8A | 8A |
| Max. Allowable Power Force | 2,000VA | 2,000VA | 2,000VA | 2,000VA |
| | 240W | 240W | 240W | 240W |
| Contact Material | Ag Alloy | Ag Alloy | Ag Alloy | Ag Alloy |
| Contact Form | DPST | DPDT | DPST | DPDT |

Max Allowable Voltage: 300VDC@0.2A

APPLICATION

Cooking Appliance, Audio Equipment, Domestic Appliance and Controlling Equipment...etc.

PERFORMANCE (AT INITIAL VALUE)

- Contact Resistance 100 mΩ Max.@1A,6VDC
- Operate Time..... 12mSec. Max. (DC coil only)
20mSec. Max. (AC coil only)
- Release Time 8 mSec. Max. (DC coil only)
20mSec. Max. (AC coil only)
- Dielectric Strength:
Between Coil & Contact..... 5,000VAC at 50/60 Hz
for one minute
Between Contacts 1,000VAC at 50/60 Hz
for one minute
- Surge Strength: 10,000V (between coil
& contact 1.2x50μSec.)
- Insulation Resistance..... 100MΩ Min at
500VDC
- Max. On/Off Switching:
Electrical6 Cycles per Minute
Mechanical.....300 Cycles per Minute
- Temperature Range-40~+85 °C
- Humidity Range 45~85% RH.
- Coil Temperature Rise 30 °C Max.

- Vibration:
Destruction 10 to 55 to 10 Hz,0.75 mm single
amplitude (1.5mm double amplitude)
Malfunction 10 to 55 to 10 Hz,0.75 mm single
amplitude (1.5mm double amplitude)
- Shock:
Destruction 1,000 m/S²
Malfunction 100 m/S²
- Life Expectancy:
Electrical 10⁵ Operations at
Rated Resistive Load
Mechanical 10⁷ Operations at
No load condition
- Weight About 12.5 g
F Type 14.0 g

ACCESSORIES & SOCKETS

- PI-50BE See Page 140
- PI-50BE/3 See Page 141
- PI-50-0..... See Page 141

SAFETY STANDARD & FILE NUMBER

- UL & C-UL..... E141060
- TÜV R50008958 (AC Coil only)
- VDE 40009648

COIL SPECIFICATION (AT 20°C)

| Coil Sensitivity | Nominal Voltage (VAC/VDC) | Nominal Current (mA) | | Coil Resistance ($\Omega \pm 10\%$) | Power Consumption (DC: W; AC: VA) | | Pull-In Voltage | Drop-Out Voltage | Maximum Allowable Voltage |
|------------------|---------------------------|----------------------|-------|---------------------------------------|-----------------------------------|------|-----------------|------------------|---------------------------|
| | | 50HZ | 60HZ | | 50HZ | 60HZ | | | |
| EMI DC Coil | 5 | 80 | | 62.5 | Abt. 0.40 | | 80% Maximum | 5% Minimum | 130% |
| | 6 | 66.7 | | 90 | | | | | |
| | 9 | 44.6 | | 202 | | | | | |
| | 12 | 33.3 | | 360 | | | | | |
| | 15 | 26.6 | | 560 | | | | | |
| | 18 | 22.3 | | 810 | | | | | |
| | 24 | 16.7 | | 1,440 | | | | | |
| | 48 | 8.7 | | 5,520 | | | | | |
| | 60 | 8.2 | | 7,340 | | | | | |
| | 110 | 4.1 | | 26,530 | Abt. 0.50 | | | | |
| EMI AC Coil | 24 | 29.75 | 25.35 | 350 | 0.71 | 0.61 | | 15% Minimum | |
| | 115 | 7.65 | 6.3 | 8,100 | 0.88 | 0.73 | | | |
| | 230 | 3.42 | 2.72 | 32,500 | 0.79 | 0.63 | | | |

ORDERING INFORMATION

EMI - SS - 2 12 F M I F

Insulation System:

Nil: Standard Class

F: Class F

Contact Material:

Nil: AgNi

N: AgSnO₂

I: AgSnO₂+ In (new)

J: AgSnO₂+In Gilded (new)

S: AgSnO₂ Gilded

Contact Form:

Nil: Form C

M: Form A

B: Form B

Type: F: New Structure DC Coil, Pinning 5.0mm, 8A

A: Standard AC Coil

Coil Voltage: VDC (05: 5V, 06: 6V, 09: 9V, 12: 12V, 15: 15V,

18: 18V, 24: 24V, 48: 48V, 60: 60V, 110: 110V)

VAC (24: 24V, 115: 115V, 230: 230V)

Number of Pole:

2: Two Poles

Type of Sealing:

SS: RT II Flux Proofed

SH: RT III Wash Tight

Model Name:

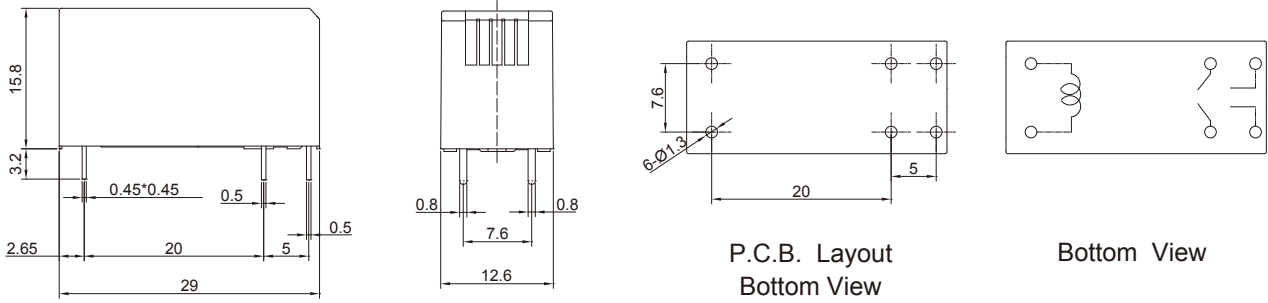
EMI

CLASSIFICATION

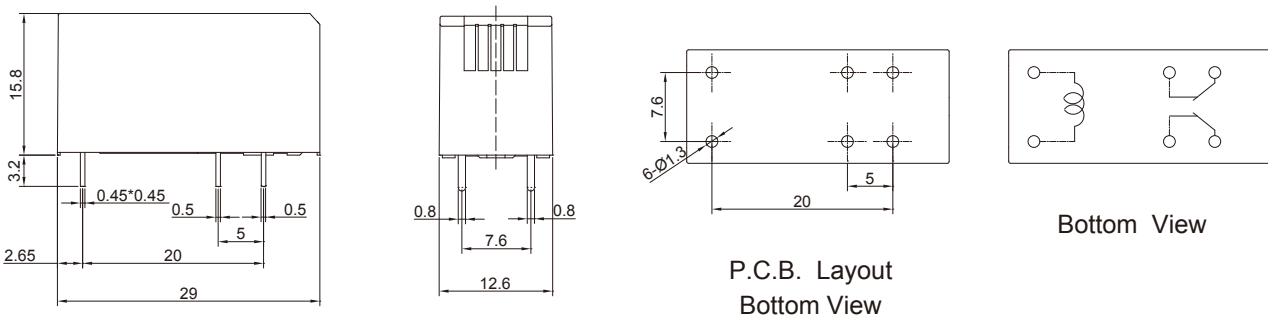
| Model | EMI - 2P | | | | | |
|-------------------|--------------|---------------|---------------|--------------|---------------|---------------|
| | DC Coil | | | AC Coil | | |
| Contact Form | 2C | 2A | 2B | 2C | 2A | 2B |
| Flux Proofed | - | - | - | EMI-SS-2□□□A | EMI-SS-2□□□AM | EMI-SS-2□□□AB |
| Flux Proofed- New | EMI-SS-2□□□F | EMI-SS-2□□□FM | EMI-SS-2□□□FB | - | - | - |
| Wash Tight | - | - | - | EMI-SH-2□□□A | EMI-SH-2□□□AM | EMI-SH-2□□□AB |
| Wash Tight- New | EMI-SH-2□□□F | EMI-SH-2□□□FM | EMI-SH-2□□□FB | - | - | - |

DIMENSION ($\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.1\text{mm}$)

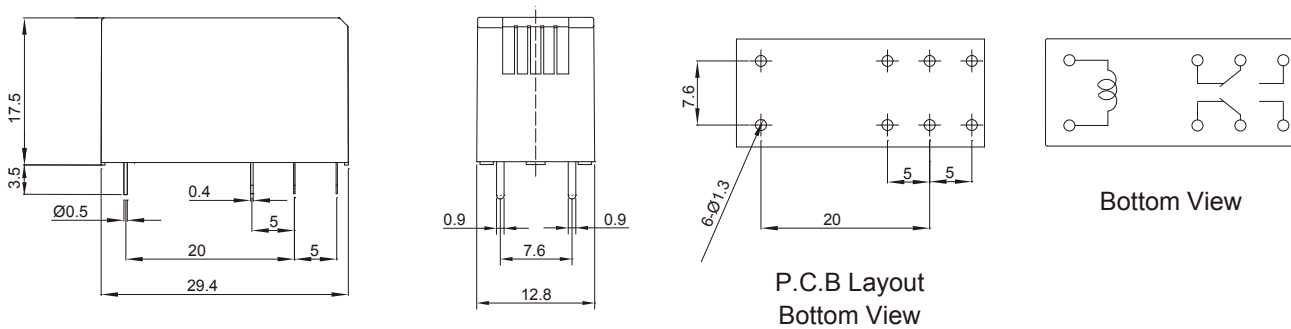
EMI-SS/SH-2/AM



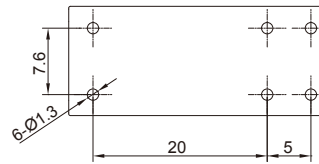
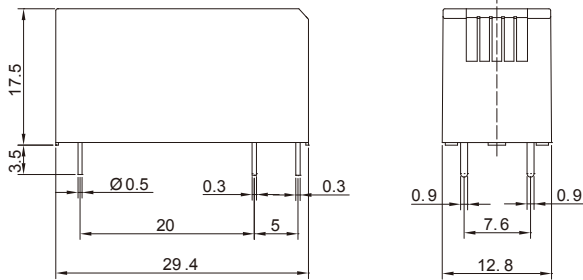
EMI-SS/SH-2/AB



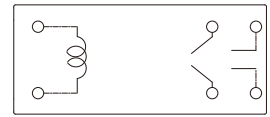
EMI-SS/SH-2F (New Structure DC Coil)



EMI-SS/SH-2FM (New Structure DC Coil)

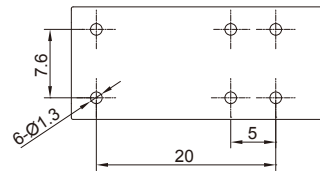
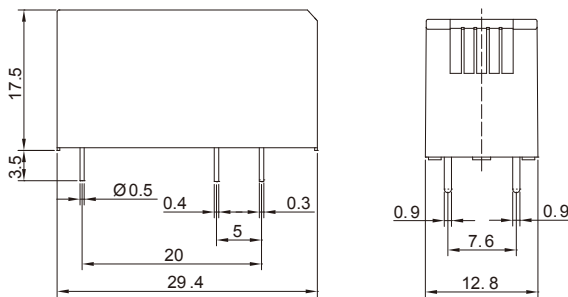


P.C.B Layout
Bottom View

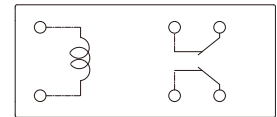


Bottom View

EMI-SS/SH-2FB (New Structure DC Coil)



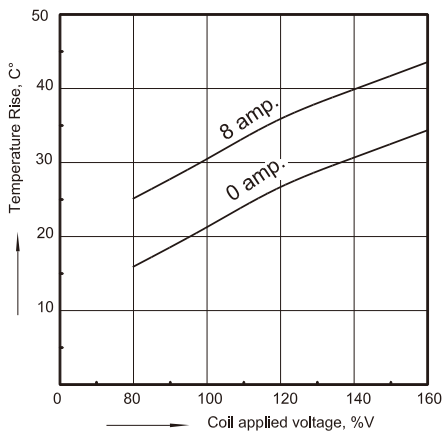
P.C.B Layout
Bottom View



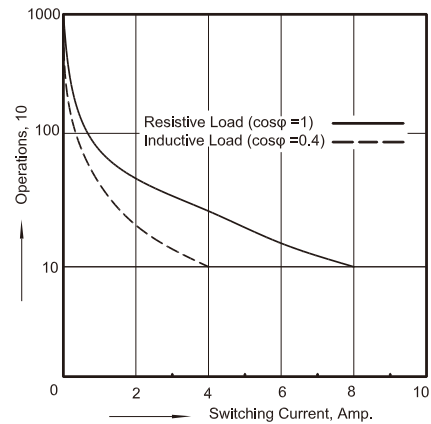
Bottom View

REFERENCE DATA

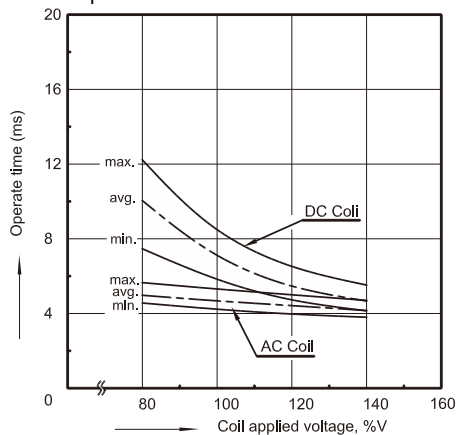
Temperature Rise (at 85°C)



Endurance



Operate time



Release time

