

Main Feature



1. EMF Series Relays are designed for switching capacity by 25A to comply with industrial control system use.
2. Compatible fasten terminal arrangement with this kind of power relay.
3. Simple magnetic circuit to meet mass production for low cost offer.
4. Standard type contact form SPST are available for customer's selection.
5. Operating ambient temperature range covers from -40°C to 105°C.
6. In accordance with IEC 60335-1 and IEC 60730-1.

Contact Rating

Load Type	EMF (DM)	EMF (DB)
Rated Load (Resistive)	UL:25A 250VAC	VDE:16A 250VAC
	VDE:18A 250VAC	
	UL:25A 30VDC	UL:25A 30VDC
Rated Carrying Current	25A	25A
Max. Allowable Voltage	AC 250V	AC 250V
	DC 30V	DC 30V
Max. Allowable Current	25A	25A
Max. Allowable Power Force	6,250VA	4000VA
	750W	750W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	SPST	SPST

Application

General Control, Home Appliance.

Performance (at Initial Value)

- Contact Resistance 100 mΩ Max. @1A,6VDC
- Operate Time 12mSec. Max.
- Release Time 8 mSec. Max.
- 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.
- Insulation Resistance 100MΩ Min. at 500VDC.
- Max. On/Off Switching:
 - Electrical 6 Cycles per Minute.
 - Mechanical 300 Cycles per Minute.
- Temperature Range -40~105°C.

- Humidity Range 45~85% RH.
- Coil Temperature Rise 35°C Max.
- Vibration:
 - Endurance 10 to 55 Hz dual amplitude width 1.5 mm
 - Error Operation 10 to 55 Hz dual amplitude width 1.5mm.
- Shock:
 - Endurance 1,000 m/S².
 - Error Operation 100 m/S².
- Life Expectancy:
 - Electrical 10⁵ Operations at Rated Resistive Load.
 - Mechanical 10⁷ Operations at No load condition.
- Weight About 14 g.

Safety Standard & Its File Number

- UL & C-UL E141060
- VDE 40009648

Coil Specification (at 20°C)

Coil Sensitivity	Nominal Voltage(VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
EMF	3	133	22.5	Abt. 0.4	70% Maximum	DM:10% DB:5% Minimum	130%
	5	79	63				
	6	67	90				
	9	44	203				
	12	33	360				
	15	26	563				
	18	22	810				
	24	17	1,440				
	48	8	5,760				
	60	7	9,000				

Ordering Information

EMF - SH - 1 03 D M H

Terminal Type:

H: Horizontally Bring Terminal
V: Vertical Bring Terminal

Contact Material:

M: One Form A
B: One Form B

Coil Type:

D: Standard DC Coil

Coil Voltage: 03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V, 18: 18V, 24: 24V, 48: 48V, 60: 60V

Number of Pole:

1: One Pole

Type of Sealing:

SS: Flow Solder Type
SH: Plastic Sealed Type

Type:

EMF

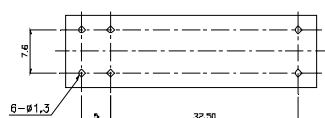
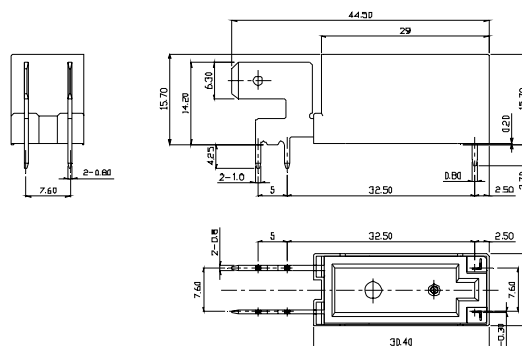
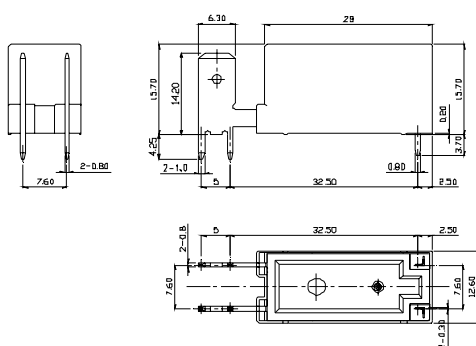
Classification

Model	EMF	
Coil Sensitivity	Standard DC Coil	
Contact Form	1A	1B
Flow Solder Type	EMF-SS-1□□DM□	EMF-SS-1□□DB□
Plastic Sealed Type	EMF-SH-1□□DM□	EMF-SH-1□□DB□

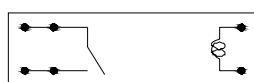
Dimension ($\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.1\text{mm}$)

EMF-SS/SH-V

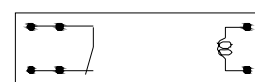
EMF-SS/SH-H



P.C.B. Layout



(1A)



(1B)

BOTTOM VIEW