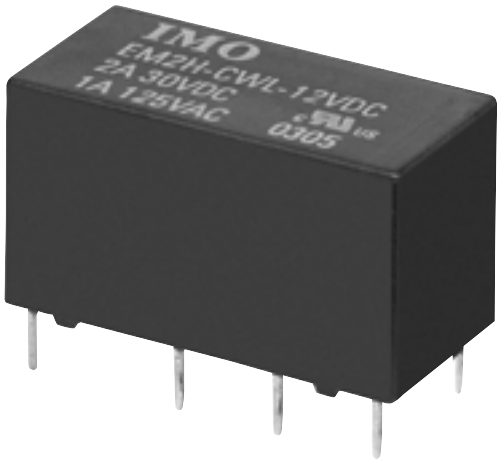
Subminiature Signal Relay EM2

- DPCO DIL Package
- High switching capacity 60W, 125VA
- High coil sensitivity 150mW available
- Fully sealed for immersion cleaning
- UL/cUL Approved
- RoHS Compliant



Options and ordering codes

EM2 **H** - **C** **W** **L** - **5VDC**

Sensitivity

Standard	nil
Sensitive	S
High Sensitive	H

Contact Form

DPCO	C

Sealing

W	Fully Sealed

L	RoHS Compliant

Coil Voltage

Contact Data

Contact arrangement	2C
Initial Contact Res. Max	50mΩ
Contact Material	AgNi (Au Clad)
Contact Rating (Res. Load)	2A 30VDC 1A 125VAC
Max. switching power	125VA/60W
Max. switching voltage	120VDC/240VAC
Max. switching current	2A
Min. Applicable load	10mV 10μA
Mechanical life	$1x10^8$ OPS
Electrical life	$1x10^5$ OPS (at 2A 30VDC) $3x10^5$ OPS (at 1A 30VDC)

Characteristics

Initial Insulation Resistance		1000MΩ 500VDC
Dielectric Strength	Between coil and contacts	1500VAC 1min.
	Between open contacts	1000VAC 1min.
Operate time (at nomi. Volt)		Max. 6ms
Release time (at nomi. Volt)		Max. 4ms
Ambient temperature		-40˚C to 85˚C
Humidity		40% to 85% R.H.
Temperature rise		Max. 65˚C
Vibration resistance		DA: 1.5mm 10 to 55Hz
Shock Resistance	Functional	196m/s² (20g)
	Destructive	980m/s² (100g)
Termination		PCB
Unit weight		Approx. 5g
Construction		Sealed

Coil

Coil power	Standard: 360mW	Sensitive: 200mW
		High Sensitive: 150mW

Subminiature Signal Relay EM2

Coil Data

EM2 Type — Standard (360mW) — 20˚C

Coil Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance Ω ± 10%	Allow Voltage VDC
3	2.25	0.3	30±10%	4.5
5	3.75	0.5	90±10%	8.0
6	4.50	0.6	130±10%	10.0
9	6.80	0.9	280±10%	14.5
12	9.00	1.2	450±10%	18.5
15	11.3	1.5	625±10%	22.0
24	18.0	2.4	1600±10%	35.5
48	36.0	4.8	4000±10%	56.0

EM2S Type — Sensitive (200mW) — 20˚C

Coil Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance Ω ± 10%	Allow Voltage VDC
3	2.25	0.3	45±10%	6
5	3.75	0.5	125±10%	10
6	4.50	0.6	180±10%	12
9	6.80	0.9	405±10%	18
12	9.00	1.2	720±10%	24
15	11.3	1.5	1125±10%	30
24	18.0	2.4	2880±10%	48

EM2H Type — High Sensitive (150mW) — 20˚C

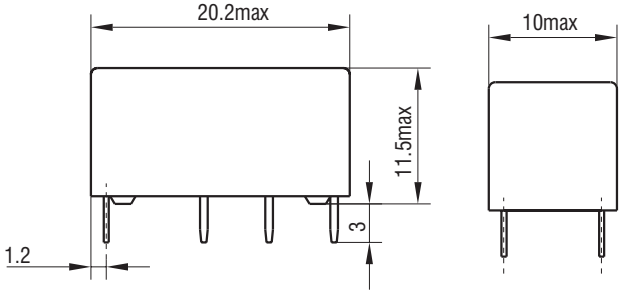
Coil Voltage VDC	Pick-up Voltage VDC (max)	Drop-out Voltage VDC (min)	Coil Resistance Ω ± 10%	Allow Voltage VDC (max)
3	2.4	0.3	60±10%	7.0
5	4.0	0.5	167±10%	11.5
6	4.8	0.6	240±10%	13.8
9	7.2	0.9	540±10%	20.8
12	9.6	1.2	960±10%	27.7
15	12.0	1.5	1500±10%	34.6
24	19.2	2.4	3840±10%	55.2

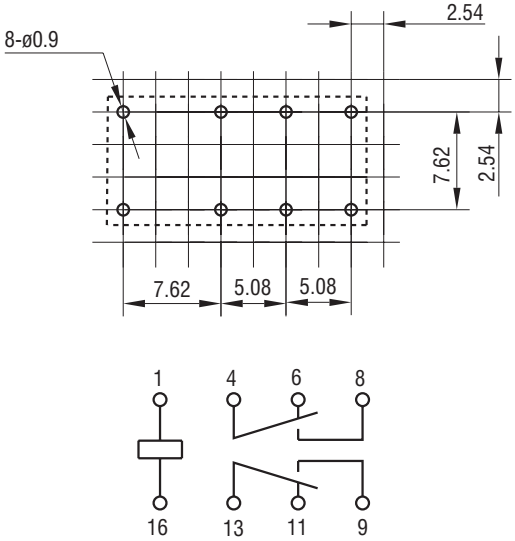
Safety Approval Ratings

UL	2A 30VDC 1A 125VAC

Outline dimensions (mm)

Wiring diagram and PC Board layout





Characteristic Curve