

SPECIFICATION

IRM

SUBMINIATURE POWER RELAY

CONTACT DATA

Contact arrangement	1A, 1C
Contact resistance	100mΩ (at 1A 6VDC)
Contact material	AgNi , AgSnO2
Contact rating (Res. load)	5A 250VAC / 30VDC
Max. switching voltage	277VAC/30VDC
Max. switching current	5A
Max. switching power	1250VA/ 150W
Min. allowing load	5VDC 100mA
Mechanical endurance	1×10 ⁷ ops
Electrical endurance	3A 250VAC/pf=0.6 100,000 on/off=1s/9s 5A 250VAC/30VDC 50,000 on/off=1s/9s

COIL DATA

at 20°C

STANDARD

3V~24V (0.45W) / 48V (0.5W)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
3	2.25	0.15	150	20 x (1±10%)
5	3.75	0.25	90	55.5 x (1±10%)
6	4.50	0.30	75	80 x (1±10%)
9	6.75	0.45	50	180 x (1±10%)
12	9.00	0.60	37.5	320 x (1±10%)
15	11.25	0.75	30	500 x (1±10%)
18	13.50	0.90	25	720 x (1±10%)
24	18.00	1.20	18.8	1280 x (1±10%)
48	36.00	2.40	10.4	4608 x (1±10%)

CHARACTERISTICS

Insulation resistance		1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	1000VAC 1min
Withstand Impact Voltage		Between Coil&Contacts 10KV (1.2x50us)
Operate time (at nomi. Volt.)		10ms max.
Release time (at nomi. Volt)		5ms max.
Shock resistance	Functional	10G
	Destructive	100G
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		5 ~ 90%
Ambient temperature		-40°C to 85/105°C
Termination		PCB
Unit weight		Approx. 5g

SENSITIVE

(0.2W)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
3	2.25	0.15	66.7	45 x (1±10%)
5	3.75	0.25	40	125 x (1±10%)
6	4.50	0.30	33.3	180 x (1±10%)
9	6.75	0.45	22.2	405 x (1±10%)
12	9.00	0.60	16.7	720 x (1±10%)
15	11.25	0.75	13.3	1128 x (1±10%)
18	13.50	0.90	11.1	1620 x (1±10%)
24	18.00	1.20	8.3	2880 x (1±10%)

Notes : 1) The data shown above are initial values.

ORDERING INFORMATION

	IRM	1A	1	S	T	L	E	F	XXX	DC12V
Type										
Contact Form	1A : 1 Form A , 1C : 1 Form C									
PCB Mounting	1=type1, 2=type2, 3=type3, 4=type4									
Case Enclosure	Nil=soldered, S=Sealed									
Contact Material	Nil=AgNi, T=AgSnO2									
Coil Power	Nil=standard, L=sensitive									
Load	Nil=standard load, E=high load(10A)									
Insulation System	F=F level, Nil=B level									
Special Parameter	Numbers or letters denote customer's requirements,e.g:"GWT" Stands for in accordance with GWT750 requirements									
Coil Voltage	3, 5, 6, 9, 12, 15, 18, 24, 48 VDC									

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

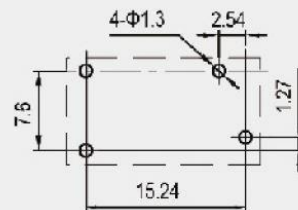
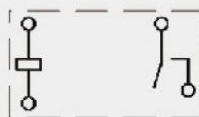
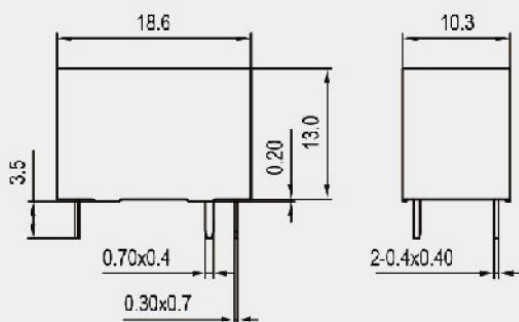
Unit:mm

1A1

Outline Dimension

Wiring Diagram

Mounting Dimension

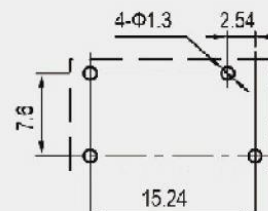
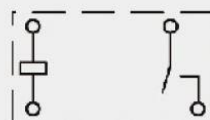
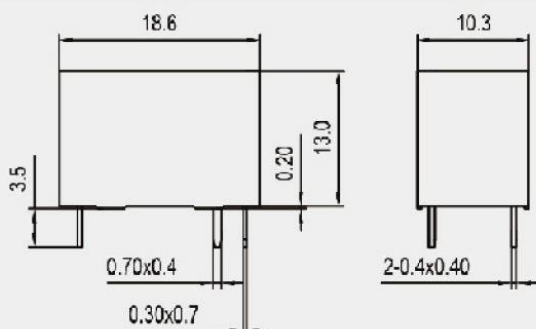


1A2

Outline Dimension

Wiring Diagram

Mounting Dimension

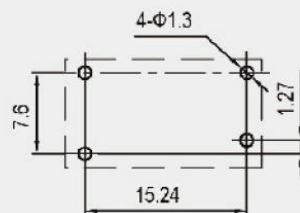
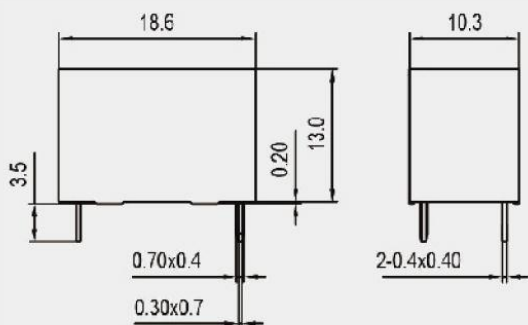


1A3

Outline Dimension

Wiring Diagram

Mounting Dimension

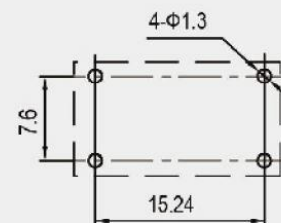
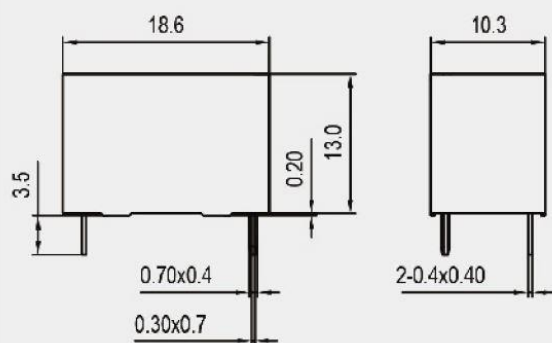


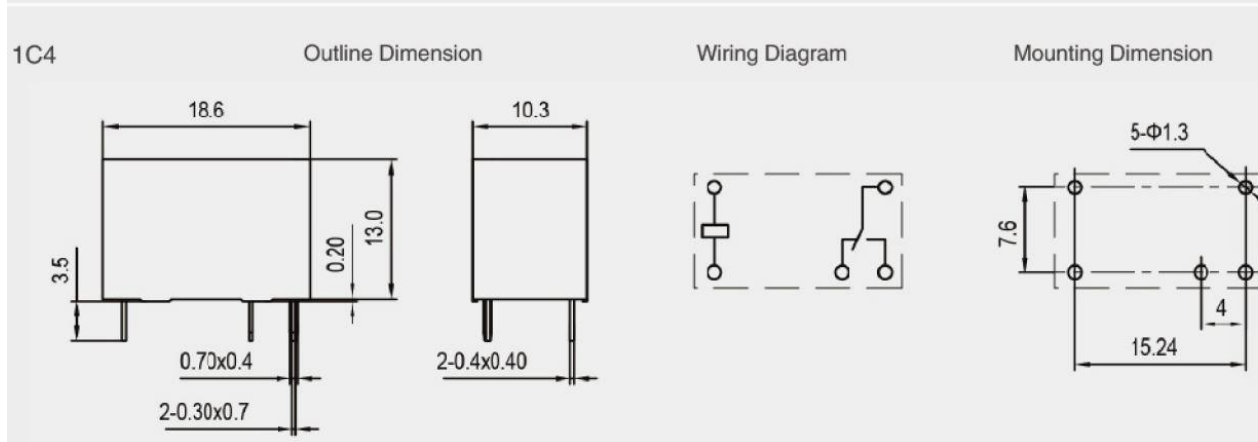
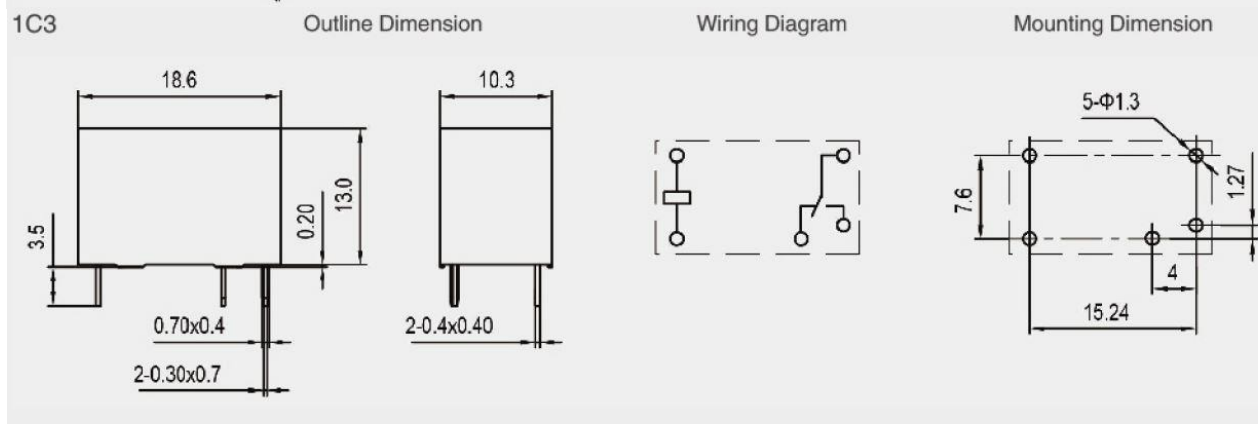
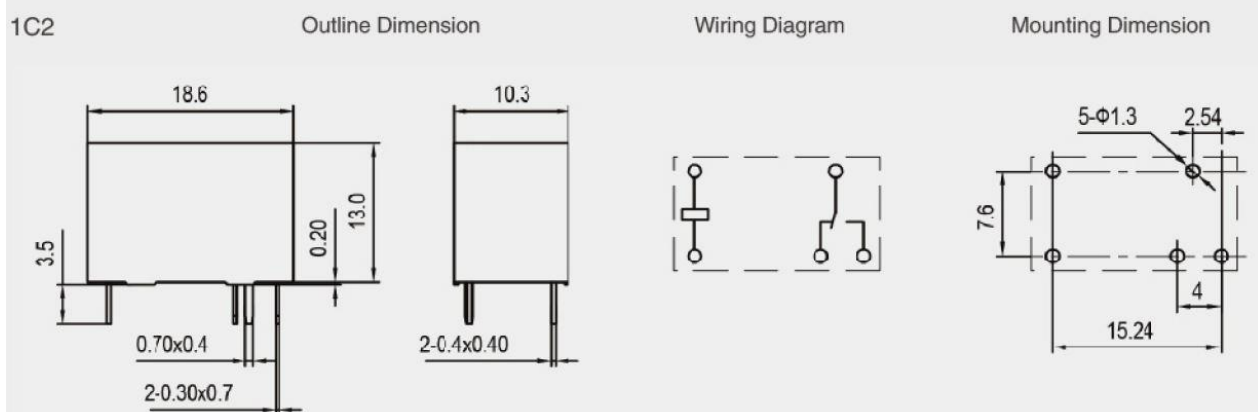
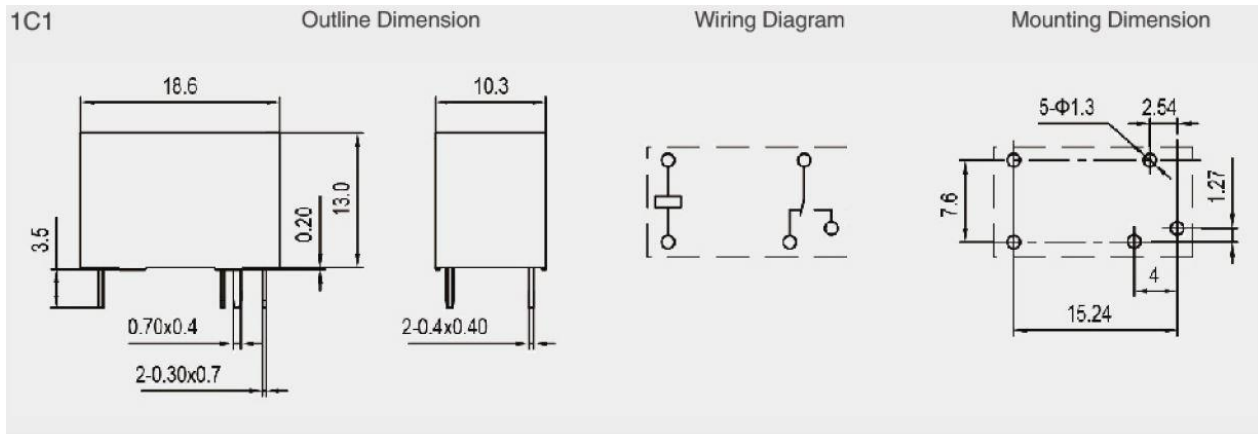
1A4

Outline Dimension

Wiring Diagram

Mounting Dimension





Note: (1) The tolerance value is not been marked in the outline dimension, when outline dimension $\leq 1\text{mm}$, the tolerance value is $\pm 0.2\text{mm}$; outline dimension is $1 \sim 5\text{mm}$, the tolerance value is $\pm 0.3\text{mm}$; outline dimension $\geq 5\text{mm}$, the tolerance value is $\pm 0.5\text{mm}$.
 (2) When the mounting dimension is not been marked, the tolerance value is $\pm 0.1\text{mm}$.