ACR02F Series

Features

- 80A switching capability
- 1 Form A & 1 Form C contact arrangement
- Coil voltage:6~72VDC
- Various mounting terminations available
- Plastic sealed and dust protected types available

▶ CONTACT DATA

Contact arrangement	1A	1C
Contact Resistance	100mΩ (1A 24 VDC)	
Contact material	AgCdO、AgSnO,	
Contact rating(Res.load)	80A 14VDC	NO 80 A 14VDC NC 70 A14VDC
Max.switching power	1120W	
Max.switching voltage	30VDC	
Max.switching current	80A	
Mechanical endurance	1×10^7OPS	
Electrical endurance	1×10^5OPS	

▶ CHARACTERISTICS

Insulation resistance		100MΩ(500VDC)
Dielectric strenght	Between coil & contacts	750VAC 1 min
	Between open contacts	500VAC 1min
Operate time(at nomi.volt)		10ms max.
Release time(at nomi.volt)		10ms max.
Shock resistance	Functional	$98m/s^2$
	Destructive	$980m/s^2$
Vibration resistance		10Hz ~55Hz 1.5mm DA
Humidity		98% RH,40℃
Ambient temperature		-55℃ ~85℃
Termination		QC,PCB Terminal
Unit weight		Weather-proof cover:Approx.55g Others:Approx.35g
Construction		Plastic Sealed,Dust protected

▶ COIL DATA at 23℃

	Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance ×(1±10%)Ω	Parallel resistance 2) ×(1±5%) Ω	Equivalent resistance Ω	Power consumption W	Max.allowable overdrive Voltage 1) VDC	
								23 ℃	85 ℃
Weather-proof cover	6	3.6	0.6	22	---	---	1.6	10.1	7.9
	6	3.6	0.6	22	180	19.6	1.8	10.1	7.9
	12	7.2	1.2	90	---	---	1.6	20.2	15.7
	12	7.2	1.2	90	680	79.5	1.8	20.2	15.7
	24	14.4	2.4	360	---	---	1.6	40.5	31.5
	24	14.4	2.4	360	2700	317.6	1.8	40.5	31.5
Others	6	3.9	0.6	22	---	---	1.6	10.1	7.9
	6	3.9	0.6	22	180	19.6	1.8	10.1	7.9
	12	7.8	1.2	85	---	---	1.7	20.2	15.7
	12	7.8	1.2	85	680	75.6	1.9	20.2	15.7
	24	15.6	2.4	350	---	---	1.6	40.5	31.5
	24	15.6	2.4	350	2700	309.8	1.9	40.5	31.5

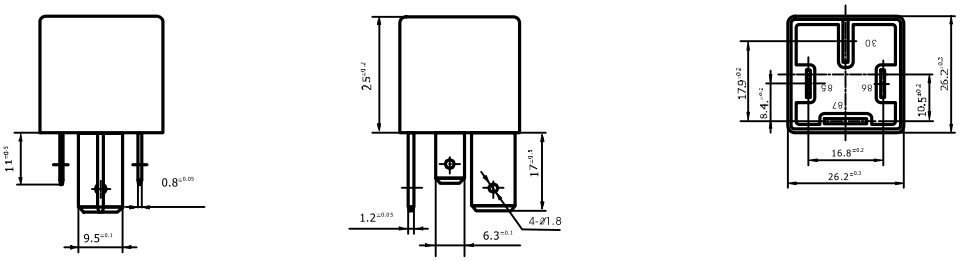
▶ MODEL DESCRIPTION

ACR 02 [F] – [F] – [1A] [ ] [ ] [12VDC] (XXX)

- AIKS Car realay
- Design code
- Construction
  - F: Plastic sealed
  - M: Dust protected
- Version
  - Nil: QC(Without metal bracket)
  - F:QC(With metal bracket)
  - Fb:QC(With Plasticl bracket)
  - P:PCB
- Customer special code
- Coil Resistance
  - 5,6,9,12,18,24 VDC
- Parallel resistor
  - Nil:No resistor
  - R:With resistor
  - D:With Diode
- Contact Material
  - No: $AgCdo$
  - T: $AgSnO_2$
- Contact arrangement
  - 1A:1 form A
  - 1C:1 form C

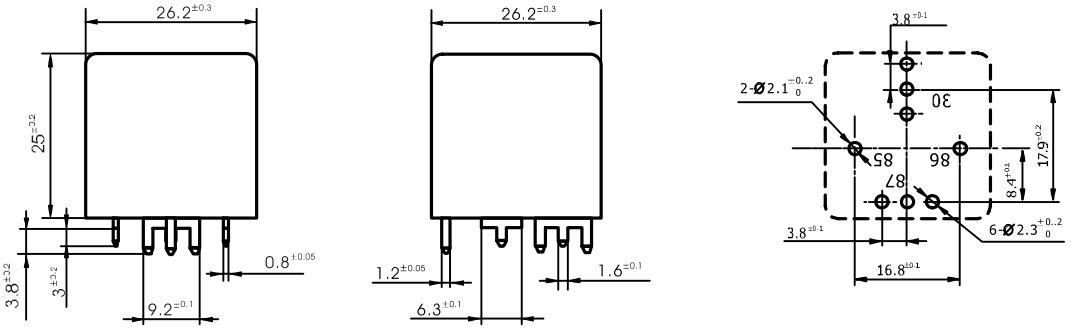
▶ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT Unit: mm

ACR02F-☐ ☐

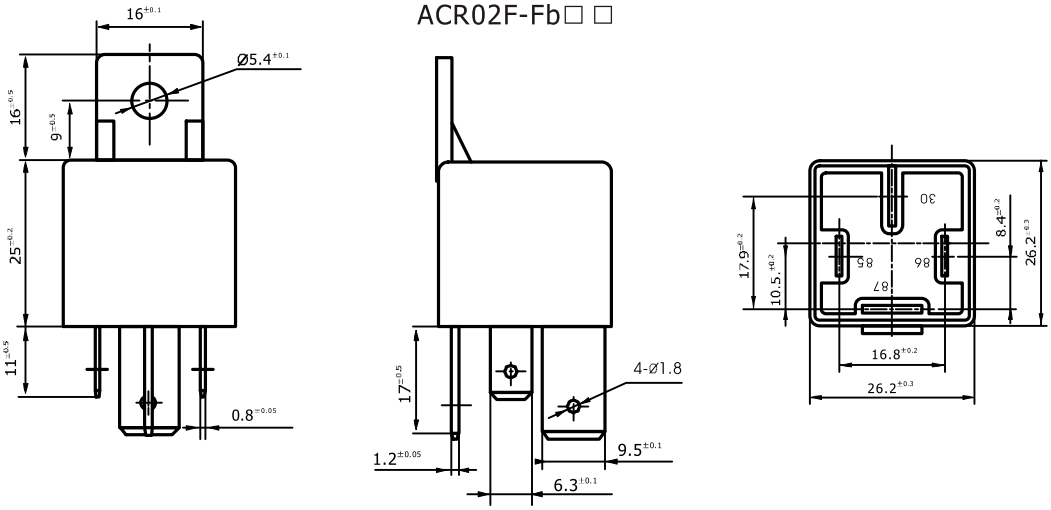


▶ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT Unit：mm

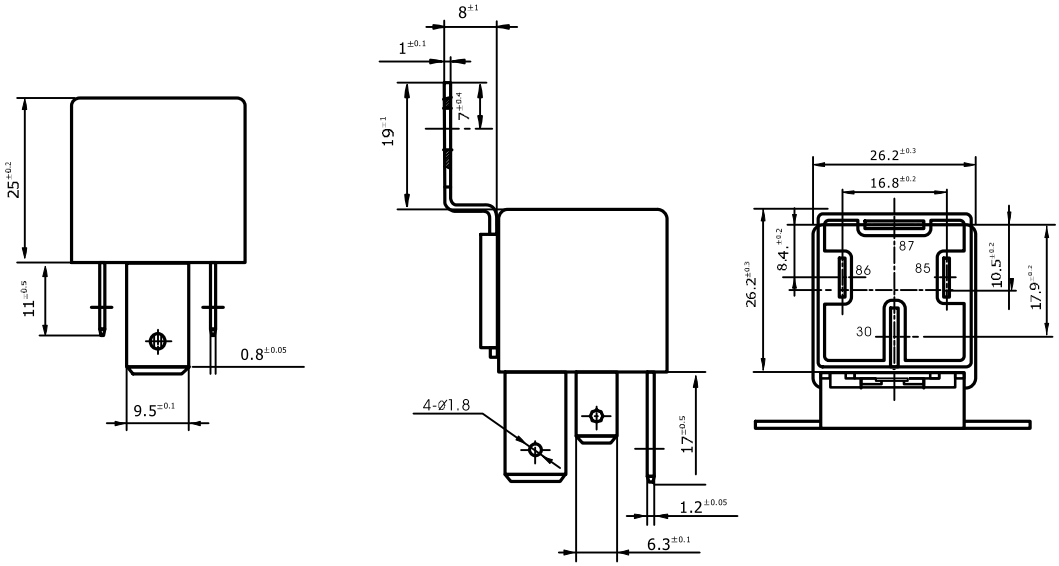
ACR02F-P□ □



ACR02F-Fb□ □



ACR02F-F□ □



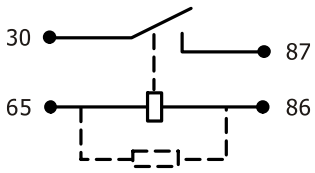
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤ 1mm, tolerance should be ± 0.2mm; outline dimension > 1mm and ≤ 5mm, tolerance should be ± 0.3mm; outline dinension > 5mm, tolerance should be ± 0.4mm

2) The tolerance without indicating for PCB layout is always± 0.1mm.。

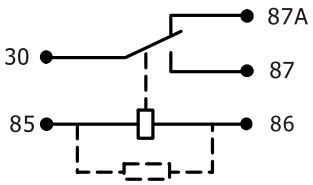
▶ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT Unit: mm

Wiring Diagram

1 Form A

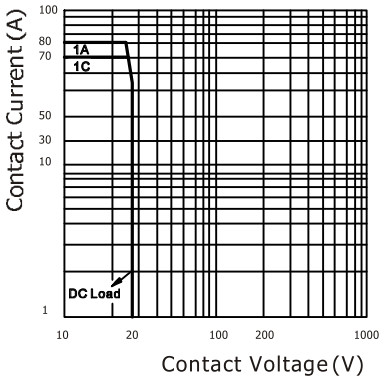


1 Form C

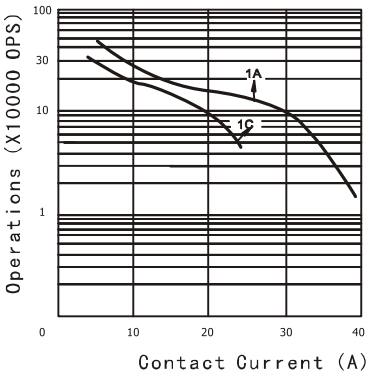


▶ Characteridtic curves

MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COLL TEMPERATURE RISE