

SPECIFICATION

IARR

AUTOMOTIVE RELAY

CONTACT DATA

Contact arrangement	1A	1C
Contact resistance	100mΩ(at 1A 6VDC)	
Contact material	Silver Alloy	
Contact rating (Res. load)	NO: 40A 14VDC NC: 30A 14VDC	
Max. switching voltage	60VDC	
Max. switching current	40A	
Max. switching power	560W	
Mechanical endurance	1 x 10 ⁷ ops	
Electrical endurance	1 x 10 ⁵ ops	

CHARACTERISTICS DATA

Insulation resistance		1000MΩ Min (at 500VDC)
Dielectric strength	Between coil & contacts	500VAC 1min
	Between open contacts	500VAC 1min
Operate time (at nomi. Volt.)		5ms.
Release time (at nomi. Volt.)		4ms.
Shock resistance	Operating Extremes	20G
	Damage Limits	100G
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		40% to 85% RH
Temperature Range		-40°C to 85°C
Termination		PCB
Unit weight		Approx. 21g
Construction		Wash tight, Flux proofed

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

2) Please find coil temperature curve in the characteristic curves below.

COIL

Coil power	160mW / 190mW
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COIL DATA

at 23°C

(160mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
3	1.95	0.3	533	6 x (1±10%)
5	3.25	0.5	320	16 x (1±10%)
6	3.9	0.6	267	23 x (1±10%)
9	5.85	0.9	178	50 x (1±10%)
12	7.8	1.2	133	90 x (1±10%)
24	15.6	2.4	67	360 x (1±10%)

(190mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
3	1.95	0.3	633	5 x (1±10%)
5	3.25	0.5	380	13 x (1±10%)
6	3.9	0.6	317	19 x (1±10%)
9	5.85	0.9	211	43 x (1±10%)
12	7.8	1.2	158	76 x (1±10%)
24	15.6	2.4	79	300 x (1±10%)

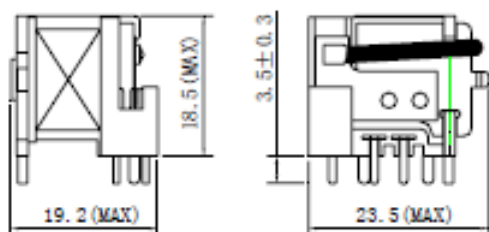
ORDERING INFORMATION

	IARR	-1A	-D12	S	L	1
Type						
Contact form	1A : 1 Form A 1C : 1 Form C					
Coil voltage	3, 5, 6, 9, 12, 24 VDC					
Construction	S : Sealed type K : Open type					
Type 2	1 : USA type 2 : EUROPE type					
Coil Power	Nil : 1.9W L : 1.6W					

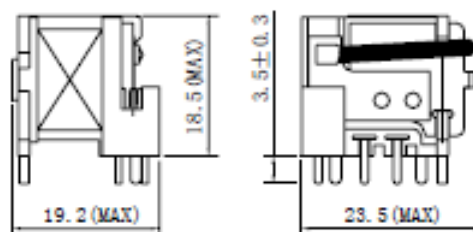
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit:mm

U. S. A open type



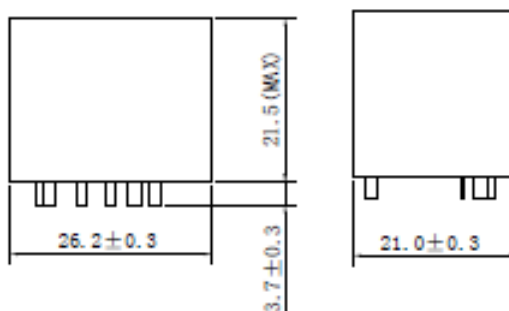
EUROPE open type



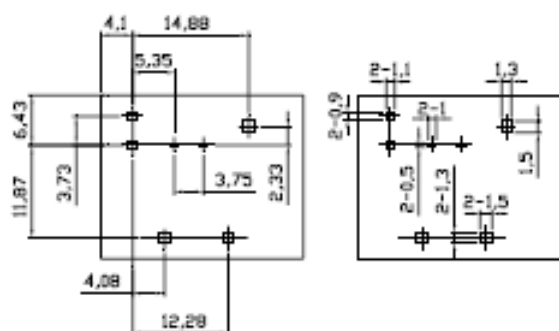
U. S. A sealed type



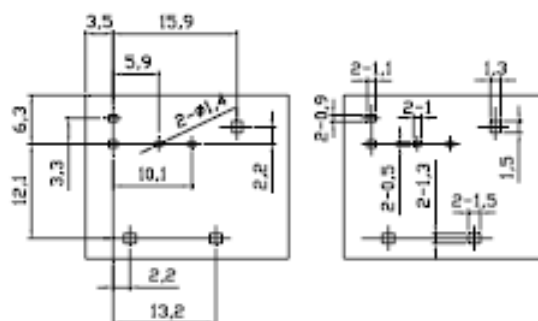
EUROPE sealed type



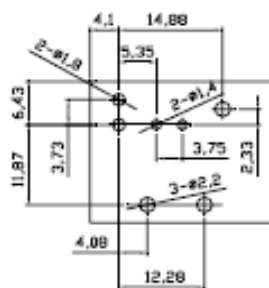
U. S. A



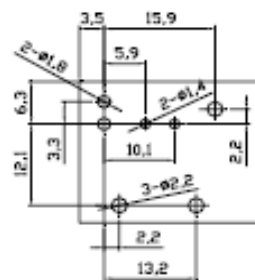
EUROPE



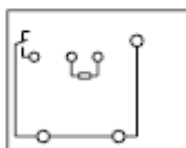
U.S.A (PCB layout)



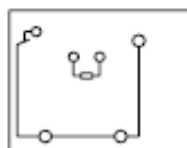
EUROPE (PCB layout)



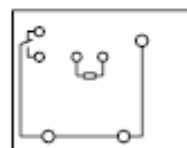
U.S.A And EUROPE



Form A



Form B



Form C

CHARACTERISTIC CURVES

