

SPECIFICATION

IARS

SUBMINIATURE POWER RELAY

CONTACT DATA (IARS)

Contact arrangement	1A	1C
Contact resistance	100mΩ (at 1A 6VDC)	
Contact material	Silver alloy	
Minimum load	0.5A 12VDC	
Max. switching current	40A	
Max. switching power	420W	
Mechanical endurance	1 x 10 ⁷ ops	
Electrical endurance	See "contact Date" Table	
Insulation resistance	100MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	500VAC 1min
	Between open contacts	500VAC 1min
Operate time (at nomi. Volt.)	4ms max.	
Release time (at nomi. Volt)	2ms max.	
Shock resistance	6 msec up to 30g (No change in the switching state>10μsec)	
Vibration resistance	10~500Hz,6g (No change in the switching state>10μsec)	
Humidity	20-50%	
Ambient temperature	-40°C to 85°C	
Max. switching frequency	Mechanical:18,000 operations/hr	
Unit weight	Approx. 4g	

Contact Rating	Load type		Contact rating		Rfrequency Ops/min	Duty Cycle	Life Expectancy
			NO	NC			
	Resistive Load		20A	--	15	0.5	3x10 ⁵
	Wiper reserve L=1.0mH	Make	25A	25A	15	0.5	3x10 ⁵
		Break	5A	5A			
	Motor reserve blocked L=0.77mH		20A Inrush		15	0.5	1x10 ⁵
	Flasher load		3x21W	--	80	0.5	2x10 ⁶
	Lamp	Inrush	100A	--	6	1/6	1x10 ⁵
		Steady state	10A	--			

COIL

Coil power	570mW / 800mW
------------	---------------

COIL DATA

at 23°C

(570mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
6	3.45	0.6	95	63 x (1±10%)
12	6.9	1.2	47.5	254 x (1±10%)
24	13.8	2.4	23.7	1010 x (1±10%)

(800mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
6	3.45	0.6	133.3	45 x (1±10%)
12	6.9	1.2	66.7	180 x (1±10%)
24	13.8	2.4	33.3	720 x (1±10%)

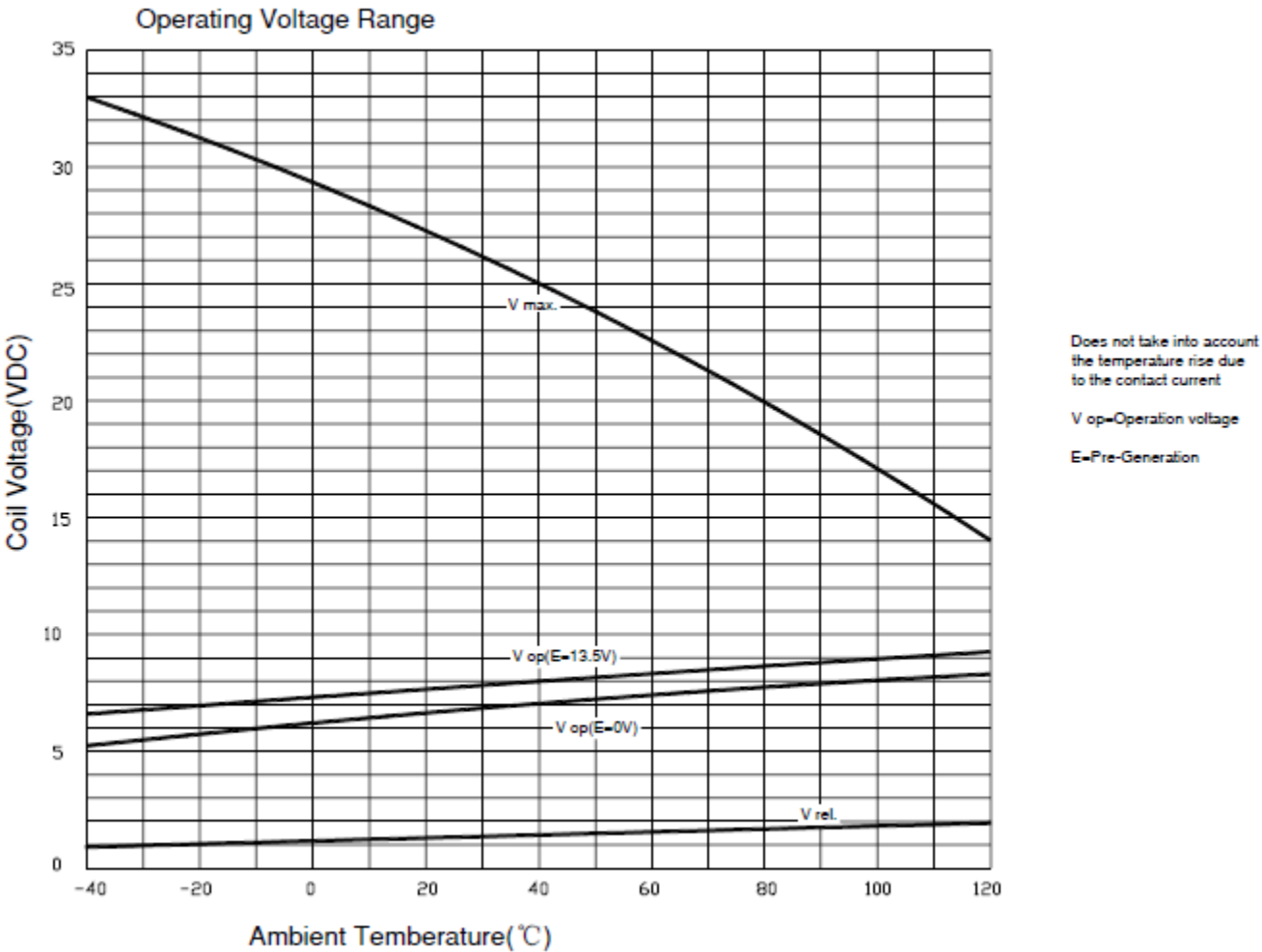
Notes : 1) The data shown above are initial values.

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

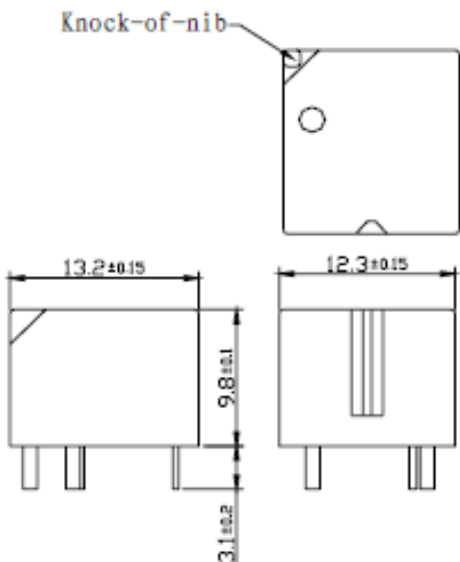
ORDERING INFORMATION

	IARS	-1A	D12	S	NiI
Type					
Contact form	1A : 1 Form A 1C : 1 Form C				
Coil voltage	6, 12, 24 VDC				
Construction	S : Sealed type				
Coil power (Only IRJ Type)	L : 0.57W Nil : 0.8W				

CHARACTERISTIC CURVES

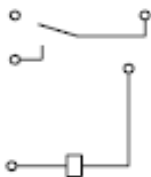


Outline Dimensions-Single Relay

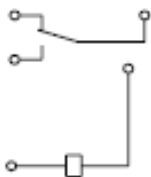


Wiring Diagrams-Single Relay(Bottom Views)

1 Form A



1 Form C



Suggested PC Board Layout-Single Relay(Bottom View)

