

SPECIFICATION

IARD

SUBMINIATURE POWER RELAY

CONTACT DATA (IARD)

Contact arrangement	1A	1C
Contact resistance	50mΩ (at 1A 6VDC)	
Contact material	Silver alloy	
Contact rating (Res. load)	25A 14VDC	20A 14VDC
Max. switching voltage	24VDC	
Max. switching current	25A	
Max. switching power	350W	
Mechanical endurance	1 x 10 ⁷ ops	
Electrical endurance	1 x 10 ⁵ ops	

CONTACT DATA

Insulation resistance		100MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	1000VAC 1min
	Between open contacts	500VAC 1min
Operate time (at nomi. Volt.)		10ms max.
Release time (at nomi. Volt.)		10ms max.
Shock resistance	Functional	10G
	Destructive	100G
Vibration resistance		10Hz to 55Hz 1.5mm
Humidity		85%(at 40°C)
Ambient temperature		-40°C to 85°C
Max switching frequency	Mechanical: 18,000 Operations/hr	
	Electrical: 1,800 Operations/hr	
Unit weight		Approx. 18g

COIL

Coil power	1200mW / 1600mW
------------	-----------------

COIL DATA

at 23°C

(1200mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
6	3.9	0.3	200	30 x (1±10%)
12	7.8	0.6	100	120 x (1±10%)
24	15.6	1.2	50	480 x (1±10%)

(1600mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (mA)	Coil Resistance Ω
6	3.9	0.3	261	23 x (1±10%)
12	7.8	0.6	133	90 x (1±10%)
24	15.6	1.2	67	360 x (1±10%)

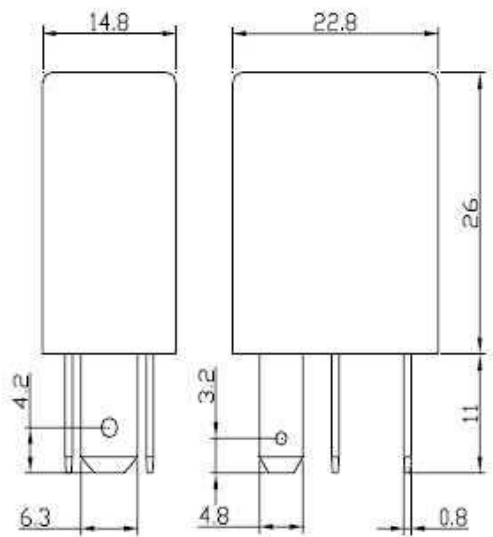
Notes : 1) The data shown above are initial values.

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

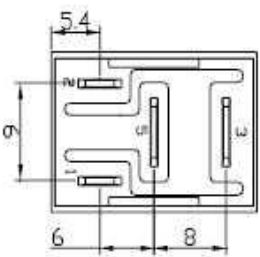
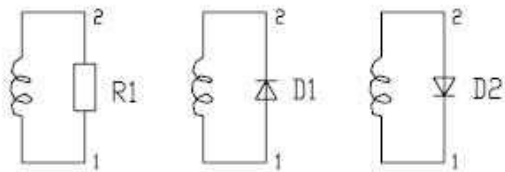
ORDERING INFORMATION

	IARD	-1A	-D12	S	R	L
Type						
Contact Form	1A : Form A 1C : Form C					
Coil Voltage	6, 12, 24 VDC					
Construction	S : Sealed F : Flux Tight					
Coil Type	Nil : Standard R1 : Coil Parallel with 1/2W resistor 180Ω for Coil Voltage 6VDC Coil Parallel with 1/2W resistor 680Ω for Coil Voltage 24VDC Coil Parallel with 1/2W resistor 2700Ω for Coil Voltage 48VDC D1 : Coil Parallel with diode 1N4148 the Positive pole “+” on #1 Terminal D2 : Coil Parallel with diode 1N4148 the Positive pole “+” on #2 Terminal					
Coil Power	Nil : 1.6W L : 1.2W					

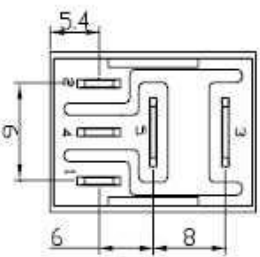
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT Unit:mm



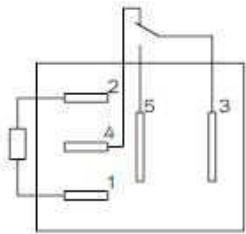
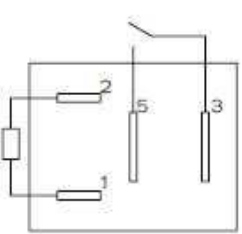
RESISTANCE (DIODE) WIRING DIAGRAM



A WIRING DIAGRAM

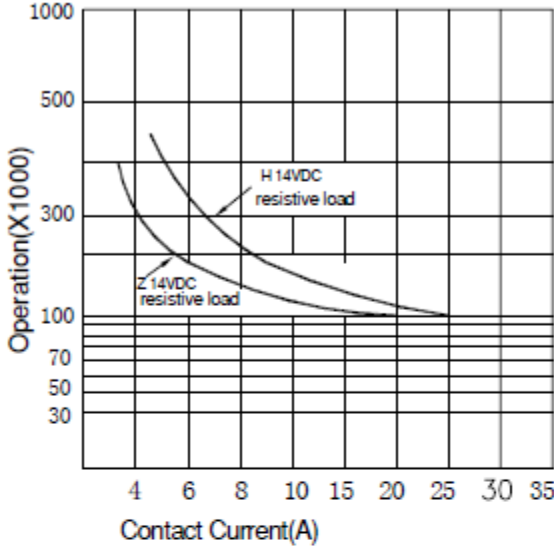


C WIRING DIAGRAM

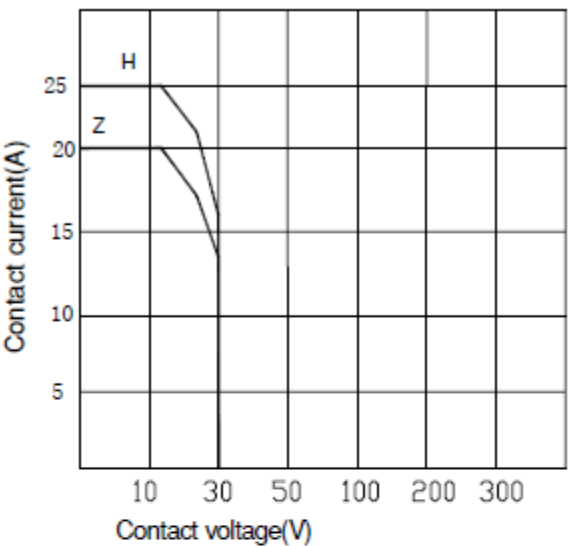


CHARACTERISTIC CURVES

Life expectancy



Coil Temperature Rise



Ambient Temperature vs. Maximum Voltage

