

FEATURES

- Two independent relay installed in one package
- Miniaturized structure, light weight

TYPICAL AUTOMOTIVE APPLICATIONS

- Power antenna
- Power window
- Interval wiper
- Slide roof control
- Tilt lock wheel
- Automatic door lock
- Automatic seat adjustment
- Immobilizers

CONTACT DATA

Form		2 Form C (2Z)
Max. Switching Current	Make	30A
	Break	30A
Material		AgNi0.15, AgSnOInO
Max. Switching Voltage		See curve, Current dependent
Max. Continuous Current		30A
Min. Load		0.1A, 12VDC
Service Life	Mechanical	10 <sup>7</sup> ops.
	Electrical	10 <sup>5</sup> ops. see Note 3

COIL DATA

Type	Coil Voltage Code	Nominal Voltage (VDC)	Resistance (Ω) ±10%	Must Operate Voltage max. (VDC)	Allowable Voltage (VDC)	Must Release Voltage min. (VDC)
Standard 0.8W	006	6	45	2.9	12.6	0.40
	009	9	100	4.4	19.0	0.60
	012	12	178	5.8	25.3	0.80
	024	24	700	11.6	51.0	1.60
Sensitive 0.6W	006	6	64	3.5	15.0	0.50
	009	9	135	5.2	22.5	0.75
	012	12	255	6.9	30.0	1.00
	024	24	1000	13.8	60.0	2.00

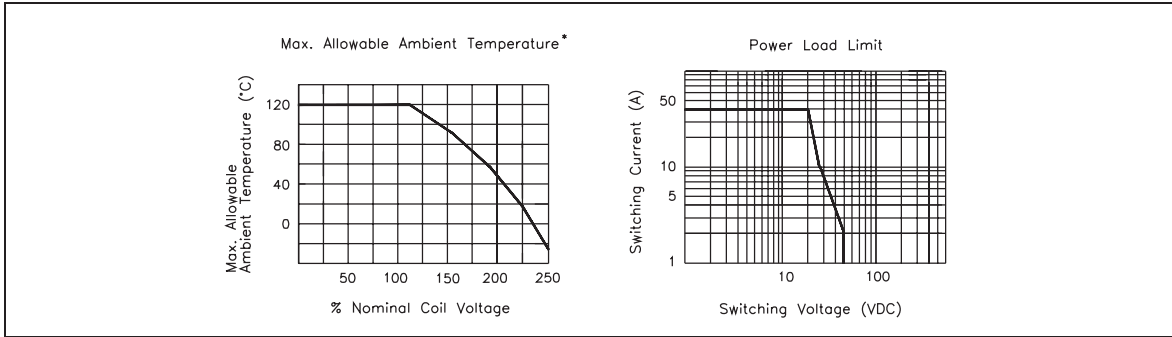
CHARACTERISTICS

Operate Time	3 ms. typical
Release Time	1.3 ms. typical
Insulation Resistance	100 MΩ, at 500 VDC, 50%RH
Dielectric Strength	500 Vrms, 1 min.
Shock Resistance	30 g, 6ms.
Vibration Resistance	6g / 30g, 10 - 200 Hz
Drop Resistance	1 M height drop on concrete
Power Consumption	Standard: 0.8W; Sensitive: 0.6W
Ambient Temperature	-40 C to 85 C operating; -40 C to 125 C storage
Weight	10 g, approx.

ORDERING DESIGNATION

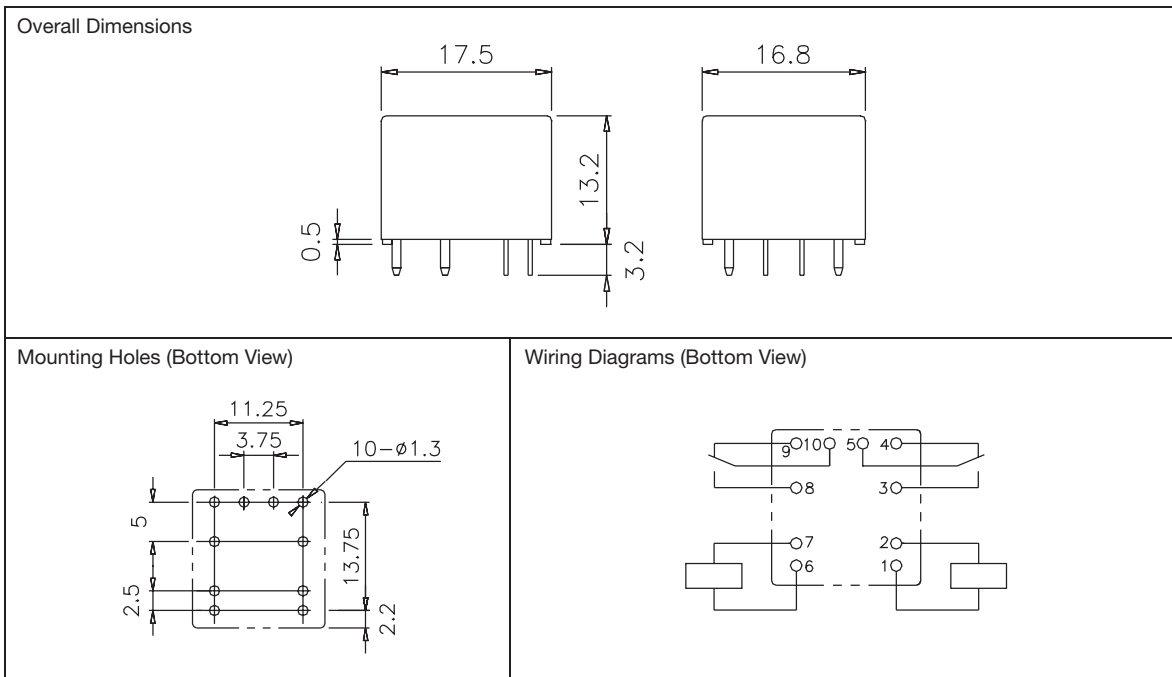
Example:	HG4519 /	012 -	2Z	1	A	L
Model						
Coil Voltage Code						
Contact Form 2Z: 2 Form C						
Version 1: Sealed						
Contact Material Nil: AgNi10; A: AgNi0.15; C: AgCdO; S: AgSnOInO						
Coil Sensitivity Nil: Standard 0.8W; L: Sensitive 0.6W						

## REFERENCE CURVE



\* Not consider temperature rise caused by contact current.

## OVERALL DIMENSIONS, MOUNTING HOLES AND WIRING DIAGRAM (mm)



## NOTES

1. All parameters, unless otherwise specified, are measured at ambient temperature 23°C.
2. Maximum make current refers to inrush current of motor load.
3. Electrical life obtained at motor load of locked rotor at 25A, 13.5VDC with operating frequency of 1 ops/sec.
4. Custom-made services available with operational quantity. Please let us know your special requirements.
5. Specifications subject to change without prior notice.