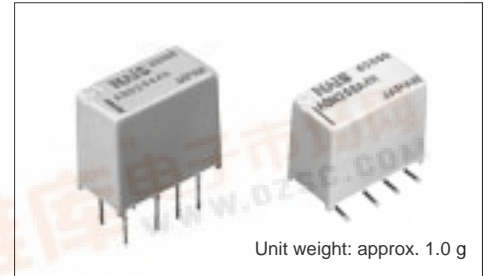




ULTRA-SMALL PACKAGE  
ECO-GREEN RELAY

AGN-Relays

- PCB board type and surface mount type
- Coil assembly molding technology
- Micro-balanced armature mechanism
- Twin crossbar contacts



Tentative data sheet

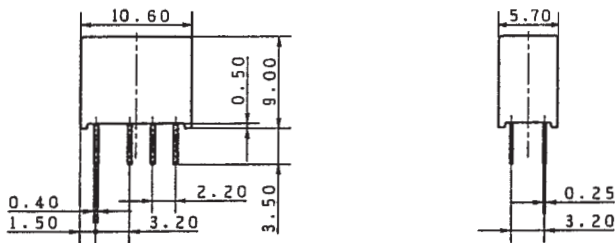
Code No.				Nominal voltage (DC, V)	Nominal operating current (DC, mA)		Coil resistance (Ω) (± 10% at 20°C)		Nominal operating power (mW) (± 10% at 20°C)	
PCB type		Surface mount type			monostable	bistable	monostable	bistable	monostable	bistable
monostable	bistable	monostable	bistable		monostable	bistable	monostable	bistable	monostable	bistable
AGN2001H	AGN2101H	AGN200A1H	AGN210A1H	1.5	93.3	66.7	16	22.5	140	100
AGN20003	AGN21003	AGN200A03	AGN210A03	3	46.7	33.3	64.3	90	140	100
AGN2004H	AGN2104H	AGN200A4H	AGN210A4H	4.5	31	22.2	145	202.5	140	100
AGN20006	AGN21006	AGN200A06	AGN210A06	6	23.3	16.7	257	360	140	100
AGN20009	AGN21009	AGN200A09	AGN210A09	9	15.5	11.1	579	810	140	100
AGN20012	AGN21012	AGN200A12	AGN210A12	12	11.7	8.3	1028	1440	140	100
AGN20024	AGN21024	AGN200A24	AGN210A24	24	9.6	5.0	2504	4800	230	120

SPECIFICATIONS (CONTACT AND CHARACTERISTICS)

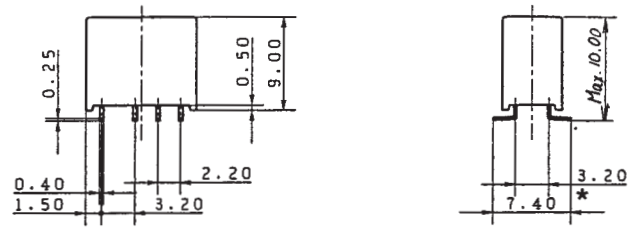
Coil data	Pick-up voltage (initial)	less than 75% of nominal voltage (at 20%) (square, pulse drive)
	Drop-out voltage (initial)	more than 10% of nominal voltage (at 20%) (square, pulse drive)
	Max. allowable voltage	150% of nominal voltage (at 20%), (120% for 24V monostable type)
Contact data	Arrangement	2c
	Contact material	Au-clad, AgPd (stationary contact) AgPd (movable contact)
	Contact resistance (initial)	Max. 100 mΩ (by voltage drop 6V DC 1A)
	Max. switching power (resistive)	30W
	Max. switching voltage	110V DC/ 125 V AC
	Max. switching current	1A DC
Expected life	Electric life (resistive)	1 x 10 <sup>5</sup> ope. at 1A 30V DC (at 20 cpm)
	Mechanical life	5 x 10 <sup>7</sup> ope. (at 180 cpm)
Breakdown voltage (initial, Detection current: 10mA)	Between open contacts	AC 750 Vrms for 1 min.
	Between contact sets	AC 1,000 Vrms for 1 min.
	Between contacts and coil	AC 1,500 Vrms for 1 min.
Surge withstand voltage (initial)	Between contacts and coil	1500 V (10 x 160 μs) [FCC P68], 2,500V (2 x 10μs) [Bellcore]
Insulation resistance (initial)		Min. 1000 MΩ at 500 V DC
Coil temperature rise value		Max. 50 K (resistance method) (Contact carry current: 1A, Coil: nominal voltage)
Vibration resistance	Functional	10 to 55 Hz at double amplitude of 3 mm
	Destructive	10 to 55 Hz at double amplitude of 5 mm
Shock resistance	Functional	Min. 750 m/s <sup>2</sup>
	Destructive	Min. 1,000 m/s <sup>2</sup>
Operate time		Max. 4 ms (at nominal voltage, without bounce)
Release time		Max. 4 ms (at nominal voltage, without bounce) (without diode) (If a diode is connected across the coil, the release time will be longer.)



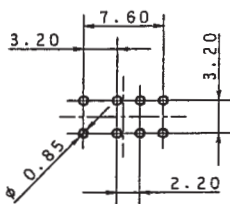
## DIMENSIONS



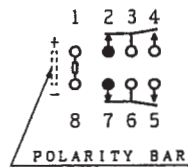
D I M E N S I O N (TOLERANCE:  $\pm 0.3$ )  
(through hole type)



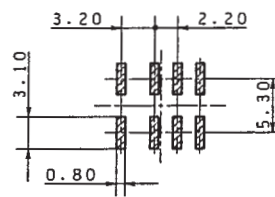
D I M E N S I O N (TOLERANCE:  $\pm 0.3$ )  
(surface mounted type)\*



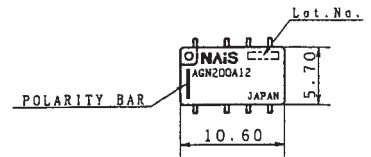
P/C BOARD PATTERN  
(TOLERANCE:  $\pm 0.1$ )



SCHEMATIC  
(BOTTOM VIEW)  
Deenergized position

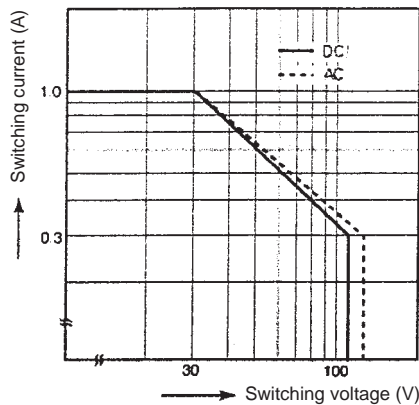


SUGGESTED MOUNTING PADS  
(TOP VIEW)  
(TOLERANCE:  $\pm 0.1$ )

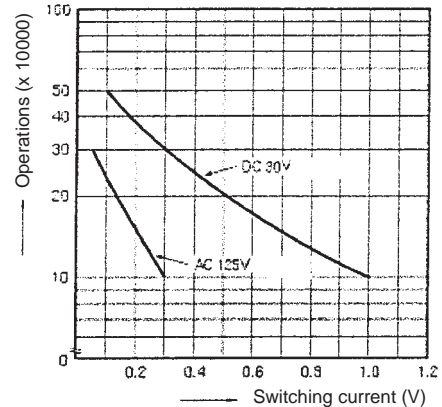


\* special version (-SS) with reduced pin length (5.70 mm top – top) on request

Load limit curve (resistive load)



Electrical life (resistive load)



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