RoHS compliant





Power relay series pursuing reliability and safety











DH1U-10A (1 pole, standard type)



DH1U-16A (High-capacity, 1 pole, 16A type)



DH1U- Ⅱ (1 pole, seal type)



DH1FU (1 pole, tab terminal type)



DH2U (2 poles, standard type)



DH2TU (2 poles, crossbar twin contacts)

Currently it is used for such purposes

- Control panel, Power supply equipment, Molding equipment, Machine tools, Welding machines, Machinery for agriculture
- Commercial equipment, Vending machines, Telecommunications equipment,
 Disaster prevention equipment, Copiers, Measuring instruments, Medical devices
- Various household appliances
- DH2TU is ideal for audio system protection

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Features

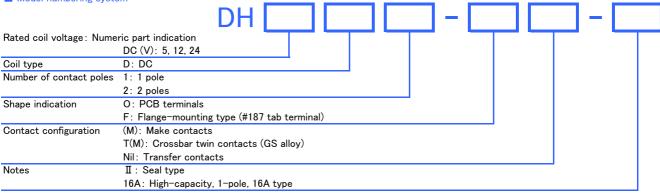
O It is a general purpose power relay of 1-pole 10A, 16A, 2-poles 5A boasting high reliability and achievement.

O PCB type and tab terminal type are prepared.

O Small size, easy to use 1-pole and 2-poles relay.

O DH2TU is ideal for audio speaker protection etc.

Model numbering system



Safety standards

		Contact ratir	Contact rating (2-poles)			
	DH1U	DH1U− II	DH1U-16A	DH1FU	DH2U	DH2TU
UL	10A 250V AC 8A 265V AC 1/3hp 265V AC TV-8/120VAC	16A 250V AC 8A 265V AC 1/3hp 265V AC	16A 250V AC	10A 277V AC	5A 265V AC 3A 30V DC 1/12hp 265V AC TV-3/120VAC	3A 120V AC 3A 30V DC
CSA	10A 250V AC 10A 30V DC TV-8/120VAC	16A 250V AC	16A 250V AC		5A 250V AC 3A 30V DC 1/4hp 240V AC TV-3/120VAC	3A 120V AC 3A 30V DC
VDE	10A $(\cos \phi = 1)$ 7.5A $(\cos \phi = 0.4)$ 250V AC	16A (cos φ =1) 12A (cos φ =0.4) 250V AC		10A (cos <i>φ</i> =1) 250V AC		
SEMKO					5A/60A 250V AC	
TUV	5A ($\cos \phi = 1$) 250V AC 3A ($\cos \phi = 0.4$) 250V AC 5A (L/R=0ms) 30V DC 5A (L/R=7ms) 30V DC		16A 250V AC			
CQC		16A 250V AC				

	rical Appliances and rials Safety Act	Conformable
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Coil ratings

Item AC/DC Voltage		Rated current (mA)	Coil resistance (Ω)	Operate voltage (V)	Release voltage (V)	Maximum voltage (V)	Power consumption (W)
				Ratio to rated voltage			
	5	106	47				
DC	12	44	275	80% max.	10% min.	110%	0.53
	24	22	1100				

● Notes: 1. Rated current and coil resistance are values at coil temperature of 20°C, tolerance is ±10%.

2. Operate voltage and release voltage are values at coil temperature of 20°C.

3. Maximum voltage is the maximum value of the allowable voltage fluctuation range of the relay coil operating power supply with the ambient temperature at 20°C.

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Ratings • Performance

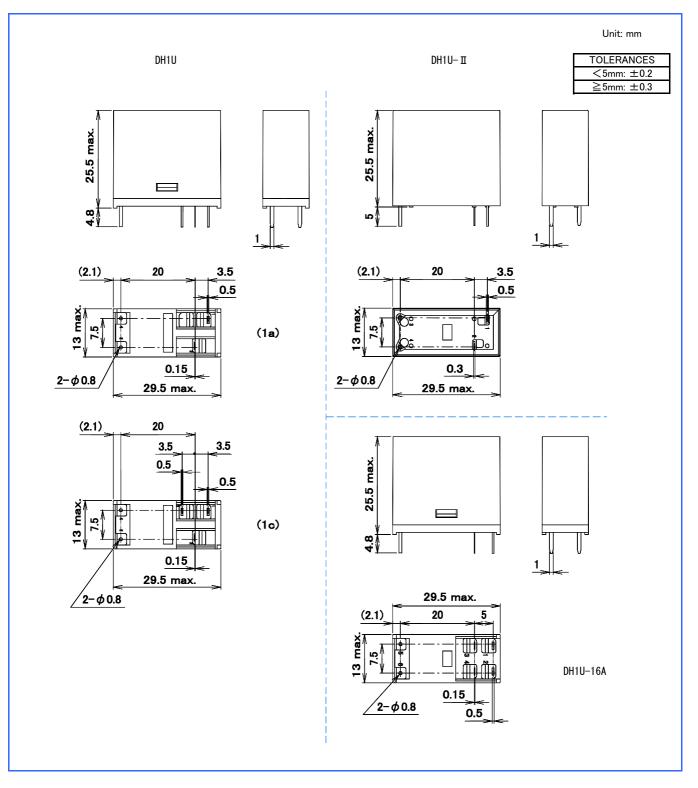
Specifications	Item		Performance (1-pole type)				
Specifications			DH1U	DH1U-16A	DH1U-II	DH1FU	
	Features		1 pole, standard type	Two terminals on PCB side	Seal type	Tab terminal	
Contact	Contact con	figuration	1a/1c	1a	1a	1a/1c	
specification	Contact resi	stance	50m Ω max. (at DC6V 1A)				
specification	Contact mat	erial	Ag alloy				
	Rated load (resistive load)	AC250V 10A	AC250V 16A	AC250V 16A	AC250V 10A	
Ratings	Max. switchi	ng capacity (resistive load)	2500VA	4000VA	4000VA	2500VA	
ratings	Max. switchi	ng voltage		AC250V			
	Max. switchi	ng current	10A, TV-8	16A	16A	10A	
	Insulation resistance		100MΩ min. (at DC500V)				
	Dielectric	Between coil and contact	AC4000V 1 min				
Electrical	strength	Between open contact	ween open contact AC1000V 1 min				
capability	Impulse withst	and voltage (between coil and contact)	10 000V min. $(1.2 \times 50 \mu \mathrm{s})$				
	Operate tim	e (at rated voltage on, at 20°C)	15ms max. (excluding contact bounce time)				
	Release time (at rated voltage off, at 20° C)		1a: 5ms max. (excluding contact bounce time)				
		u	1c: 15ms max. (excluding contact bounce time)				
	VibrationMalfunctionresistanceDestructionShockMalfunction		1a: 10 to 55 to 10Hz (double amplitude 1.5mm)				
Mechanical			1c: 10 to 55 to 10Hz (double amplitude 1.0mm)				
			100m/s ²				
	resistance Destruction		1000m/s ²				
	Mechanical endurance (at 180 times/min)		1 000 000 times min.				
	Electrical endurance (resistive load)			100 000 times min.	(at rated load)		
	(at 20 times/min)						
Conditions for	Ambient temperature		-15° C to $+60^{\circ}$ C (no freezing and condensing at low temperature)				
operation	Ambient humidity		5% to 85%RH				
Mass			approx. 17g	approx. 19g	approx. 17g	approx. 20g	

On a differentiana	Item		Performance (2-poles type)		
Specifications			DH2U	DH2TU	
	Features		2 poles, standard type	High contact reliability	
Contact specification	Contact con	figuration	2a/2c	2a (cross bar twin contact)	
	Contact resi	stance	50m Ω max. (at DC6V 1A)	30mΩ max.	
	Contact mat	erial	Ag alloy	Ag-GS clad	
	Rated load (resistive load)	AC250V/DC30V 5A	AC120V/DC30V 3A	
	Max. switchi	ng capacity (resistive load)	1250VA	360VA	
naungs	Max. switchi	ng voltage	AC250V	AC120V	
	Max. switchi	ng current	5A	3A	
	Insulation re	sistance	100MΩ min.	(at DC500V)	
	Dielectric	Between coil and contacts AC4000V 1 min		1 min	
	Dielectric strength	Between open contacts	AC1000V 1 min		
		Between opposite polarity contacts	AC1000V 1 min		
	Impulse withst	and voltage (between coil and contacts)	10 000V min.	$(1.2 \times 50 \mu\mathrm{s})$	
	Operate time	e (at rated voltage on, at 20°C)	20ms max. (excluding	contact bounce time)	
	Release time (at rated voltage off, at $20^\circ C$)		2a: 10ms max. (excluding contact bounce time)		
			2c: 20ms max. (excluding contact bounce time)		
	Vibration Malfunction		2a: 10 to 55 to 10Hz (double amplitude 1.5mm)		
	resistance	Destruction	2c: 10 to 55 to 10Hz (double amplitude 1.0mm)		
	Shock Malfunction resistance Destruction		100m/s ²		
			1000m/s ²		
Life	Mechanical e	endurance (at 180 times/min)	1 000 000 times min.		
	Electrical en (at 20 times,	durance (resistive load) /min)	100 000 times min. (at rated load)	10 000 times min. (at rated load)	
Conditions for	Ambient temperature		-15° C to $+60^{\circ}$ C (no freezing and condensing at low temperature)		
	Ambient humidity		5% to 85%RH		
Mass			approx. 18g		

• Notes: The above is the initial value.

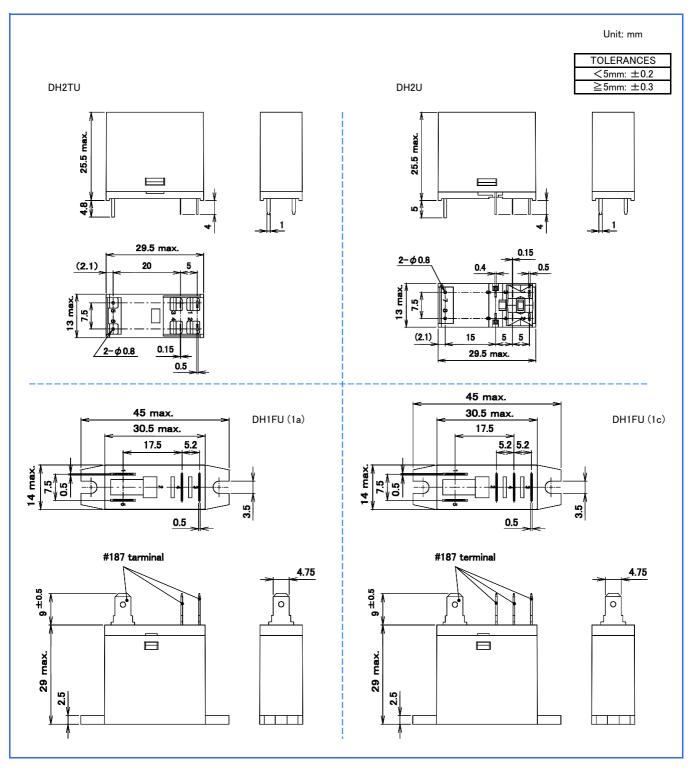
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Dimensions

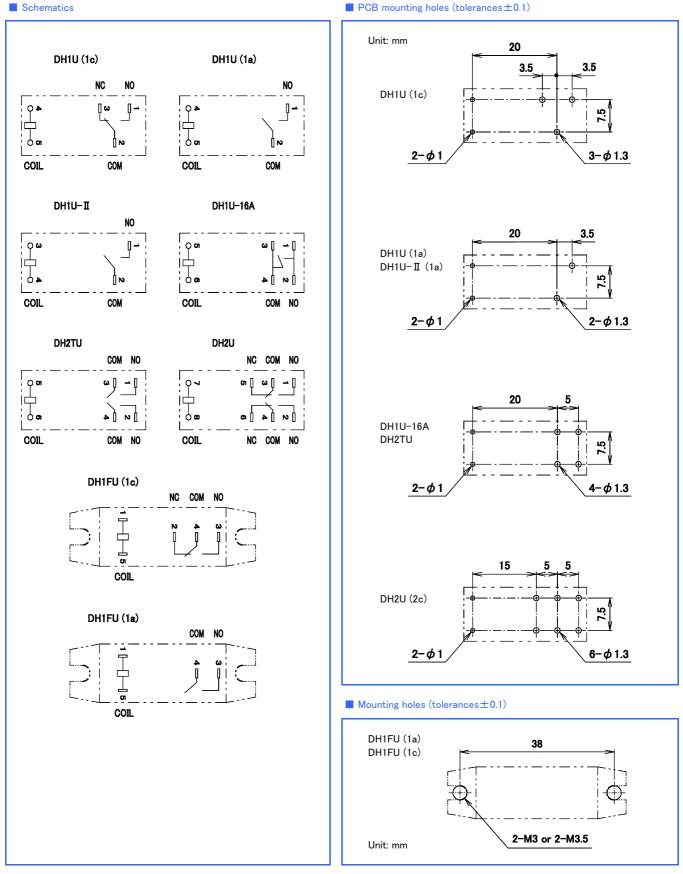


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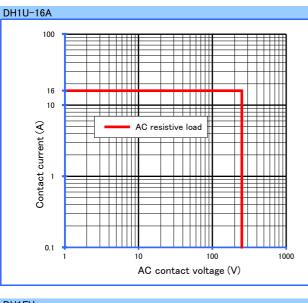
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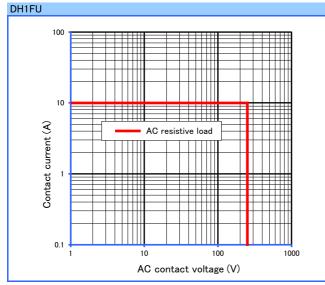
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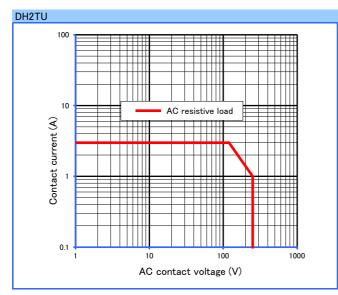
PCB mounting holes (tolerances ± 0.1)

Reference data

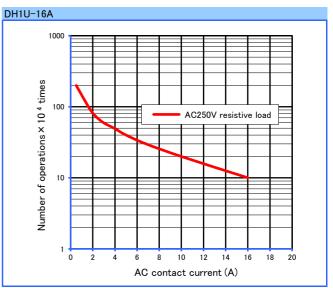
Maximum switching capacity



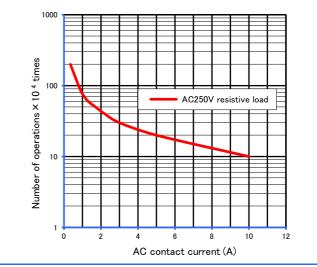


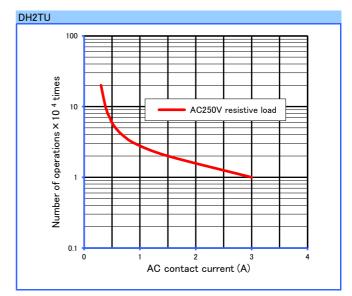


Durability curve







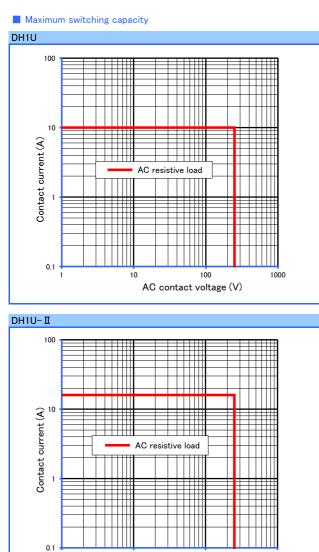


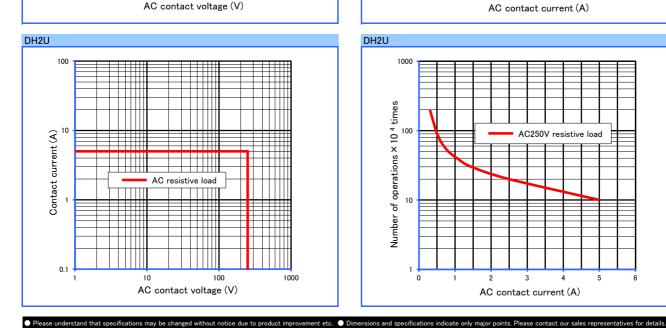
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Reference data

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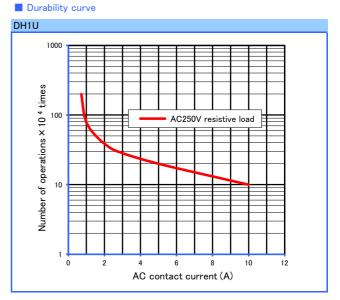
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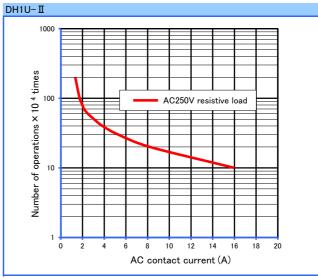
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Head office 2-2, Noge 3-chome, Setagaya-ku, Tokyo 158-0092, Japan Phone +81-3-3703-5421 Facsimile +81-3-3703-5426 URL https://www.j-dec.co.jp E-Mail: sales@j-dec.co.jp





DH2U

