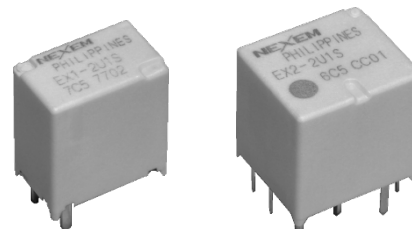


<FEATURE>

- 25A switching capacity
- Single and Twin relay (Separate type)
- High heat resistance
- Flux tight housing
- Pb free
- Through-hole reflow soldering available



<APPLICATION>

- Motor control such as window lifter, sun roof, seat, door lock, sliding door, tail gate, washer pump

<PART NUMBER SYSTEM>

EX2	-	2	U	1	S		
						Enclosure	Nil: Unsealed S: Sealed
						Must operate voltage	1: 6.5V 6: 6.0V
						Contact Material	U: Silver oxide complex alloy (Standard)
						Coil Resistance	2: 160Ω 3: 130Ω
						Type	EX2: Twin EX1: Single

Contact Form	Contact Material	Coil Nominal Voltage	Coil Resistance	Sealed Type	Unsealed Type
1 form C x 2	Standard	12VDC	160Ω	EX2-2U1S	EX2-2U1
1 form C x 2	Standard	12VDC	130Ω	EX2-3U6S	EX2-3U6
1 form C	Standard	12VDC	160Ω	EX1-2U1S	EX1-2U1
1 form C	Standard	12VDC	130Ω	EX1-3U6S	EX1-3U6

<COIL RATING>

(Ambient temperature: 20°C)

Coil Nominal Voltage	Nominal Operating Power	Coil Resistance (±10%)	Must Operate Voltage ⁽¹⁾	Must Release Voltage ⁽¹⁾
12VDC	0.9W	160Ω	6.5VDC	0.9VDC
12VDC	1.1W	130Ω	6.0VDC	0.8VDC

(1) Test by pulse voltage

<SPECIFICATIONS>

(Ambient temperature: 20°C)

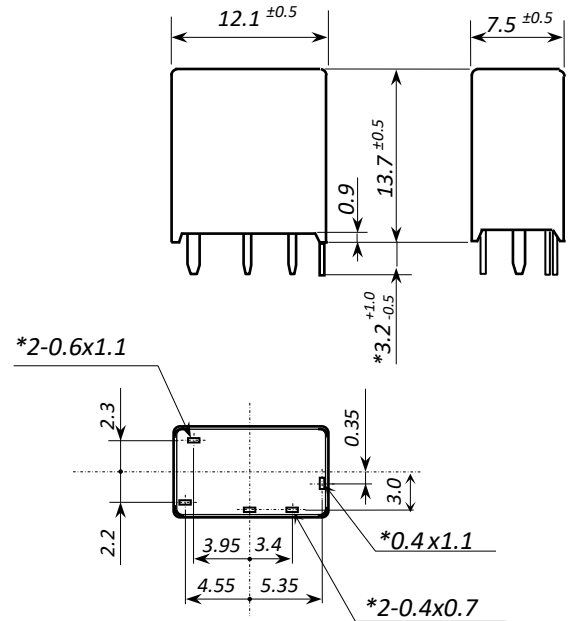
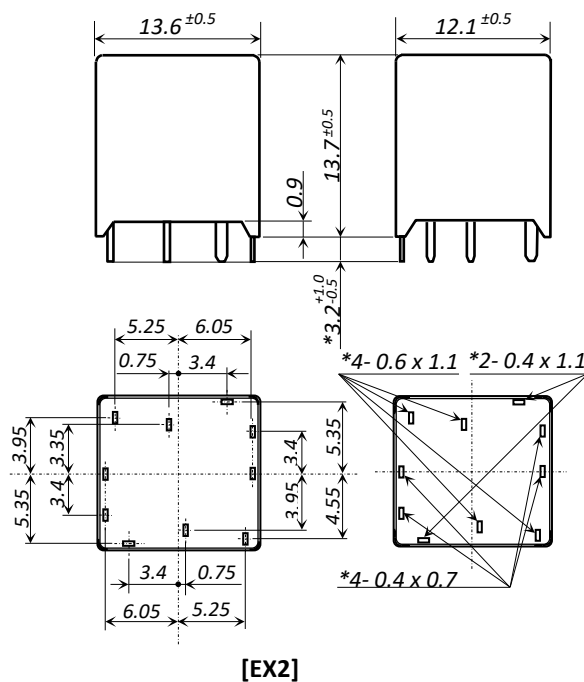
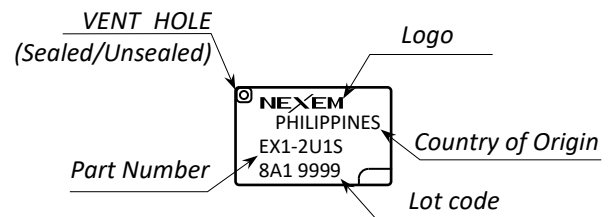
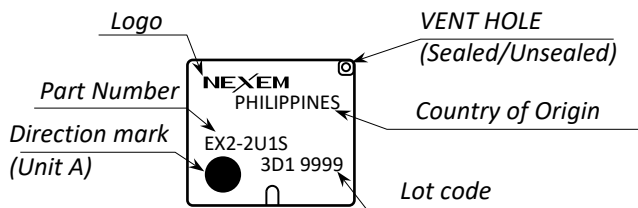
Items		Specifications	
		Twin	Single
Contact form		1 form C x 2 (Separate)	1 form C
Contact rating	Max. switching voltage ⁽²⁾	16Vdc	
	Max. switching current ⁽²⁾	60A ON / 30A OFF	
	Min. switching current	1A at 5Vdc	
	Max. carrying current ⁽³⁾	34A at 14Vdc for 1hour	
	Contact resistance	4mΩ typical, 25mΩ max. (6Vdc-7A voltage drop method, initial)	
	Rated load	25A-14Vdc, Motor load	
Contact material		Silver oxide complex alloy	
Operate time ⁽⁴⁾		10ms max.	
Release time ⁽⁴⁾		10ms max.	
Insulation resistance		100MΩ min. at 500Vdc	
Breakdown voltage	Between open contacts	500Vac min. for 1minute	
	Between coil and contact	500Vac min. for 1minute	
Shock resistance	Misoperation	98m/s ²	
	Destructive failure	980m/s ²	
Vibration resistance	Misoperation	10 to 300Hz, 43m/s ²	
	Destructive failure	10 to 500Hz, 43m/s ² for 200hours	
Ambient temperature		-40 to +125°C (no freezing and condensation)	
Life expectancy	Mechanical	1,000,000 cycles	
	Electrical	100,000 cycles (Rated load)	
Weight		6.5g typical	3.5g typical

(2) Resistive, 10cycles

(3) Copper thickness: 105μm, width: 10mm

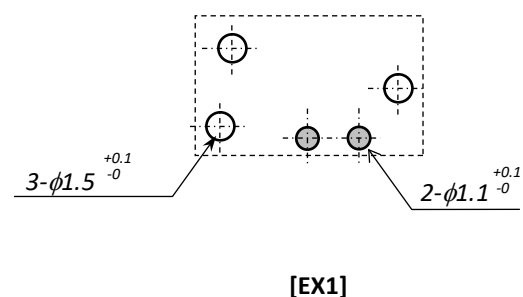
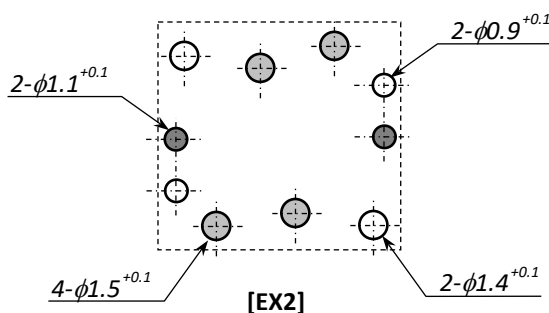
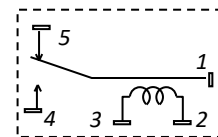
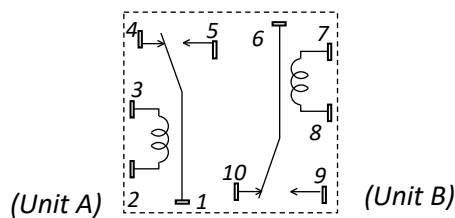
(4) Excluding contact bounce, nominal voltage applied, with flywheel coil diode

<DIMENSIONS>



[EX1] * AFTER SOLDER DIP
<Unit: mm>

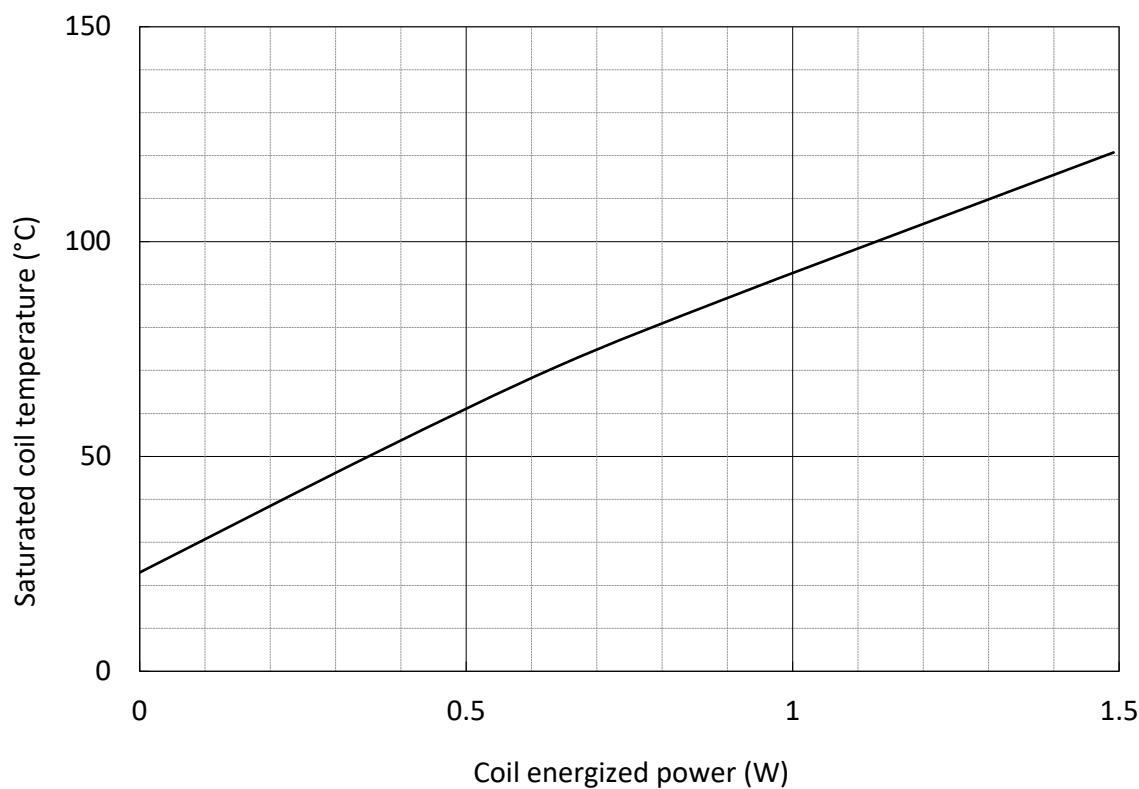
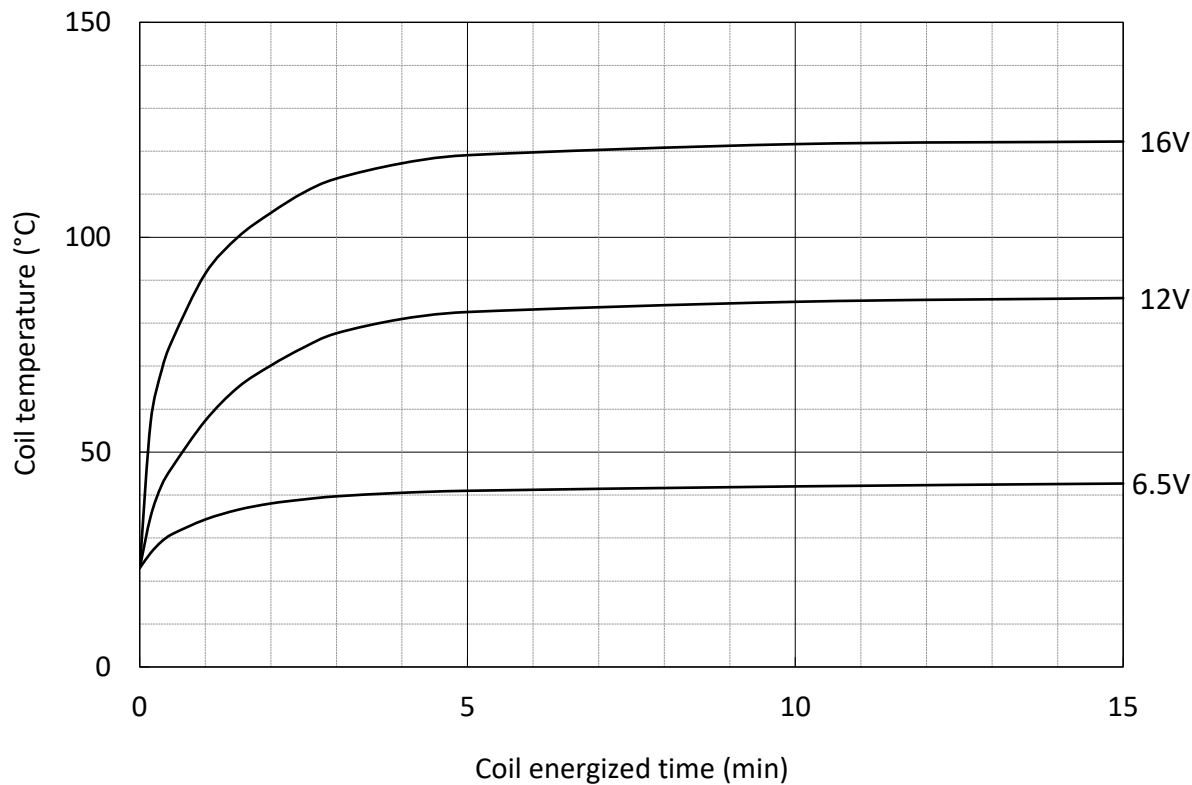
<SCHEMATIC AND PCB PAD LAYOUT (BOTTOM VIEW)>



<Unit: mm>

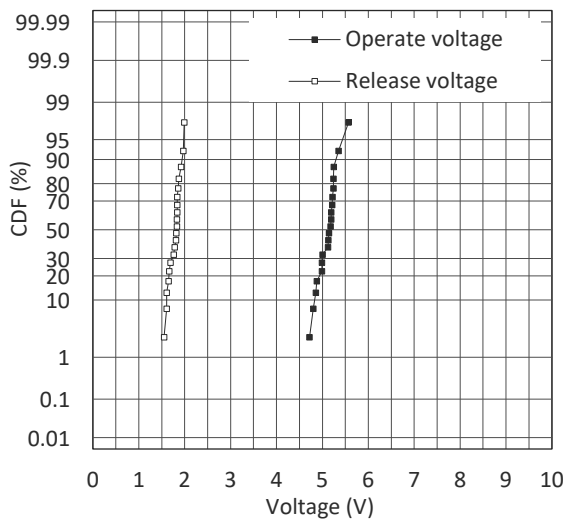
<TECHNICAL DATA>

COIL TEMPERATURE DATA (Ambient temperature: 20°C)



RELAY CHARACTERISTICS DISTRIBUTION (INITIAL)

Operate / Release voltage

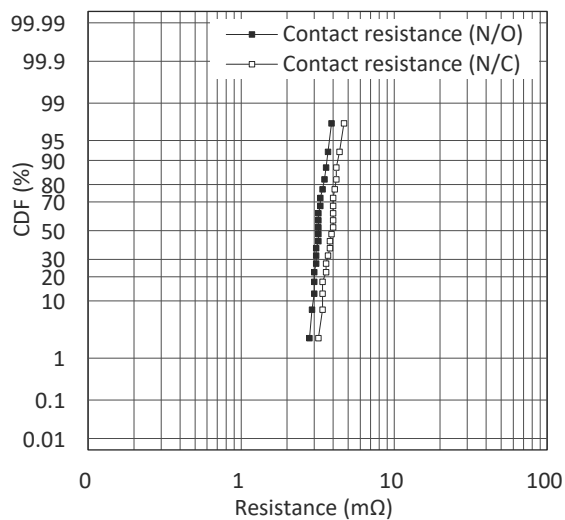


Specimen: EX2-2U1S

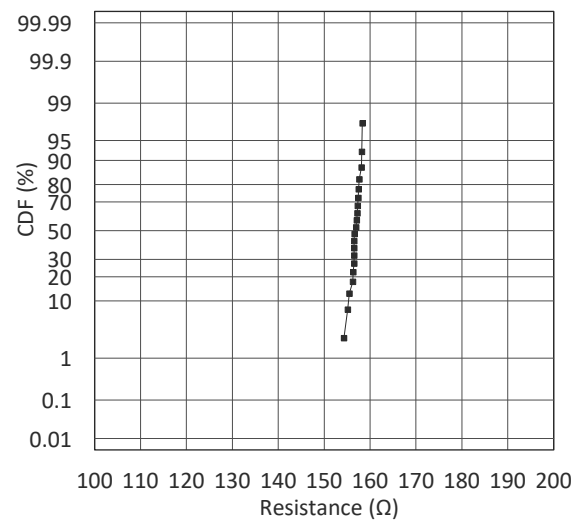
Ambient Temperature: 20°C

Quantity: 20pcs

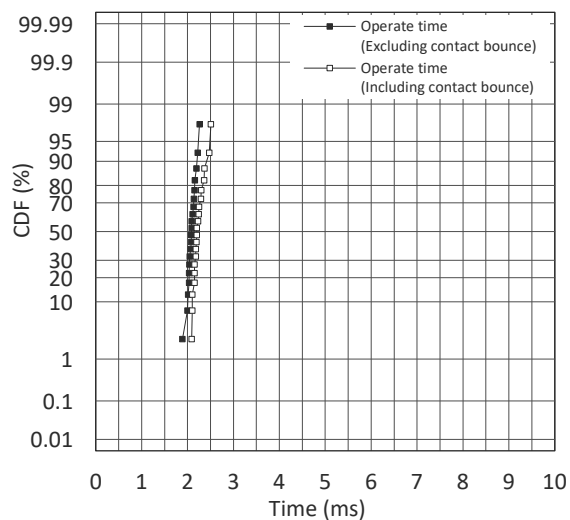
Contact resistance



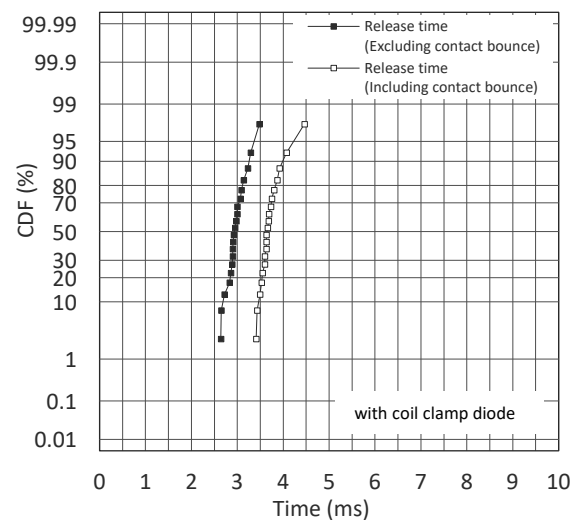
Coil resistance



Operate time



Release time



<NOTICE>

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- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "AUTOMOTIVE POWER RELAY USER'S MANUAL" in web site. (<https://www.em-devices.com/en/>)
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