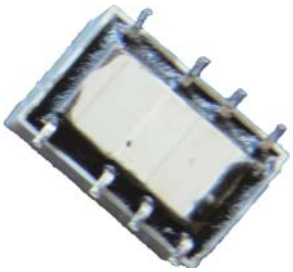
HSMR SERIES DPDT 2A

c UL us
Pending

RoHS Compliant



FEATURES

- Offers excellent board space savings
- Surge withstand voltage up to 2500V, meets FCC Part 68 and Telecordia
- Meets EN60950/EN41003
- High contact capacity 2A 30VDC
- SMT and DIP types available
- Single side stable and latching type available
- Outline Dimensions: (10.0 × 6.5 × 5.4) mm

CONTACT RATINGS

Contact Arrangement	2C
Contact Resistance	70mΩ (0.1A 6VDC)
Contact Material	Gold FLash，Silver Alloy
Contact Rating(Resistive)	2A 30VDC 0.5A 125VAC
Max. Switching Voltage	250VAC/220VDC
Max. Switching Current	2A
Max. Switching Power	62.5VA/60W
Mechanical Life	1×10^8 operations
Electrical Life	1×10^5 operations

CHARACTERISTICS

Insulation Resistance		1000MΩ (at 500VDC)
Dielectric Strength	Between coil & contacts	1600VAC 1min
	Between open contacts	1000VAC 1min
	Between contacts sets	1800VAC 1min
Surge Withstand Voltage	Between open contacts(10×160μs)	1500VAC (FCC part 68)
	Between coil & contacts(2×10μs)	2500VAC (Telecordia)
Operate time (at nomi. volt.)		3ms
Release time (at nomi. volt.)		3ms
Humidity		5% ~ 85% RH
Ambient temperature		-40°C ~ +85°C
Shock Resistance	Functional	735m/s²
	Destructive	980m/s²
Vibration Resistance	Functional	10Hz ~ 55Hz 3.3mm DA
	Destructive	10Hz ~ 55Hz 5.0mm DA
Unit weight		Approx. 0.8g
Construction		Sealed

Notes: The data shown above are initial values.

ORDERING INFORMATION

HSMR - 12 L P R - XXX

- Model: HSMR
- Coil Voltage: 12
- L:1 coil latching Nil:Single side stable: L
- P:DIP Nil: Standard SMT: P
- R:Tape and reel packing(Only for SMT type) Nil:Tube packing: R
- Customer code: XXX

COIL DATA at 23°C

Single side stable

Nominal Voltage VDC	Pick-up Voltage (Max.) VDC	Drop-out Voltage (Min.) VDC	Max. Allowable Voltage VDC	Coil Resistance Ω±10%
1.5	1.13	0.15	2.2	16
3	2.25	0.3	4.5	64.3
4.5	3.38	0.45	6.7	145
5	3.75	0.5	7.5	178
6	4.5	0.6	9.0	257
9	6.75	0.9	13.5	579
12	9	1.2	18.0	1028
24	18	2.4	36.0	2880

1 coil latching

Nominal Voltage VDC	Pick-up Voltage (Max.) VDC	Drop-out Voltage (Min.) VDC	Max. Allowable Voltage VDC	Coil Resistance Ω±10%
1.5	1.13	1.13	3.0	22.5
3	2.25	2.25	6.0	90
4.5	3.38	3.38	9.0	203
5	3.75	3.75	10.0	250
6	4.5	4.5	12.0	360
9	6.75	6.75	18.0	810
12	9	9	24.0	1440
24	18	18	36.0	2880

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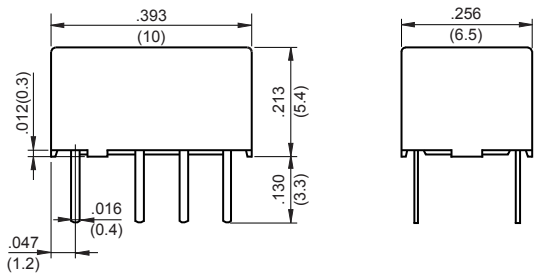
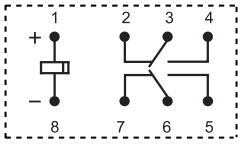
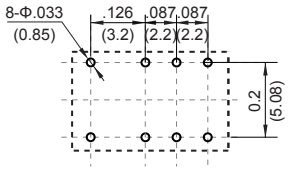
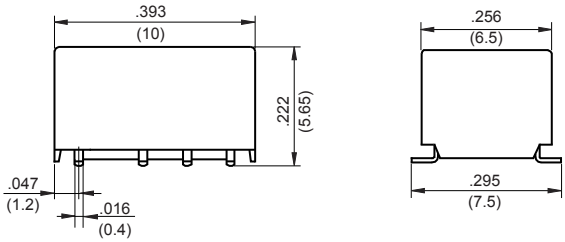
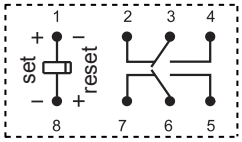
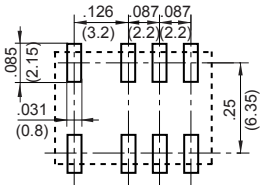
COIL

Coil Power	Single side stable: 140mW(24:200mW)
	1 coil latching: 100mW(24:200mW)
Temperature rise	50K max.(At 1A load, 85°C environment)

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT.

Unit: inch(mm)

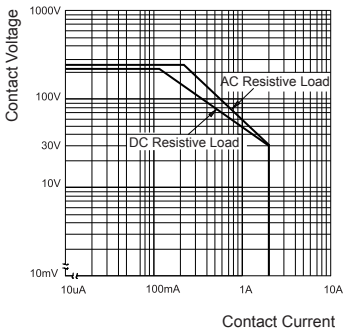
	Outline Dimensions	Wiring Diagram (Bottom view)	PCB Layout (Bottom view)
DIP type		Single side stable 	
Standard SMT type		1 coil latching 	

Remark:1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm,tolerance should be ±0.2mm; outline dimension ＞1mm and ≤5mm,tolerance should be ±0.3mm;outline dimension ＞5mm, tolerance should be ±0.4mm.

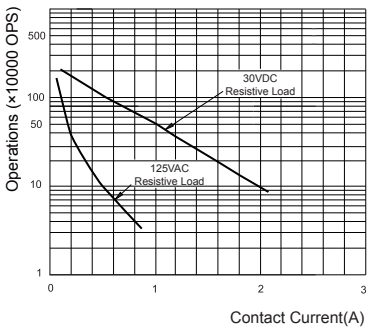
2) The tolerance without indicating for PCB layout is always ±0.1mm.

CHARACTERISTIC CURVES

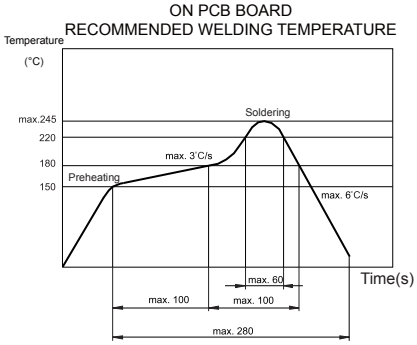
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



REFLOW WELDING,TEMPERATURE ON PCB BOARD RECOMMENDED WELDING TEMPERATURE



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