

511 Series



Features

- Heavy duty 75~120A 277VAC power type.
- SPDM contact configuration with large contact gap 3.0mm version.
- Conforms to European photovoltaic standard IEC 62109-1.
- Coil holding voltage can be reduced to 50~55%V of the nominal coil voltage for saving energy.
- High performance PCB power relay for photovoltaic power generation systems (solar inverter).
- Complies with RoHS-Directive 2011/65/EU.

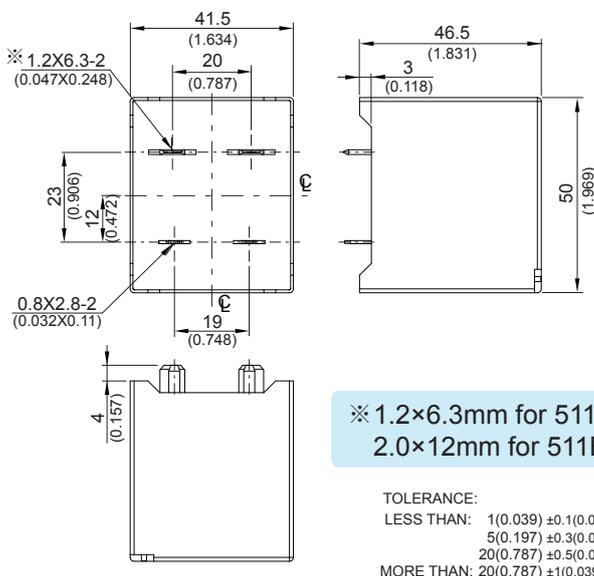


Description

Contact rating (Resistive load)	511 : Making 60A, Carrying 75A, Breaking 60A / 240VAC : T85 : ON 1s/OFF 9s : 10K ops. 511H : Making 60A, Carrying 85A, Breaking 60A / 240VAC : T85 : ON 1s/OFF 9s : 10K ops. 511E : Making 60A, Carrying 100A, Breaking 60A / 240VAC : T85 : ON 1s/OFF 9s : 10K ops.
Coil voltage	12~48VDC
Power consumption	At rated voltage : Approx. 2.4W (for 511) ; 3.2W (for 511H,511E) At holding voltage : Approx. 0.6W (for 511) ; 0.8W (for 511H,511E)
Contact material	Ag alloy
Contact gap	3.0mm Min.
Contact resistance (1)	100mΩ Max. (1A/6VDC by 4 pipes mΩ meter)
Operate time (1)	30ms Max.
Release time (1)	30ms Max.
Insulation resistance (1)	100MΩ Min. (DC 500V)
Dielectric strength (1)	Between open contact : AC 2000V, 50/60Hz 1 min. Between contact and coil : AC 4000V, 50/60Hz 1 min.
Life expectancy (Mechanical)	1,000,000 ops. (frequency 9,000 operations/hr)
Operating ambient temperature	-40~+85°C (no freezing) -40~+70°C (no freezing) for contact rating 120A
Weight	Approx. 170 g

- ※Note : (1) Initial value. Operate and release time excluding contact bounce.
(2) Consider the heat of PCB is necessary with actual application.
(3) Please contact Song Chuan for the detailed information.

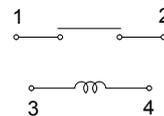
Outline Dimensions



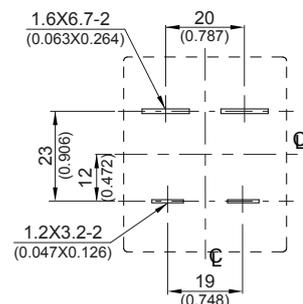
※ 1.2×6.3mm for 511,511H series.
2.0×12mm for 511E series.

TOLERANCE:
LESS THAN: 1(0.039) ±0.1(0.004)
5(0.197) ±0.3(0.012)
20(0.787) ±0.5(0.020)
MORE THAN: 20(0.787) ±1(0.039)

Wiring Diagram (bottom view)



PC board layout (bottom view)



Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.