

# SOLID STATE RELAY

# MAXIMUM LOAD CURRENT 1.5 A / 2A

## SE SERIES

### ■ FEATURES

- Conforms to UL, CSA standards
- Ultra slim and light weight, SIL terminals type
  - Size: 5.0 (W) × 20.0 (L) × 17.0 (H)mm
  - Weight: approximately 4.0 g
- High reliability, long life and maintenance free
- High isolation (between input and output)
  - Dielectric strength: 2,500 Vrms
- Internal zero cross circuit type available



### ■ ORDERING INFORMATION

[Example]      SE - 12 A 02 V F  
                   (a)    (b) (c) (d) (e) (f)

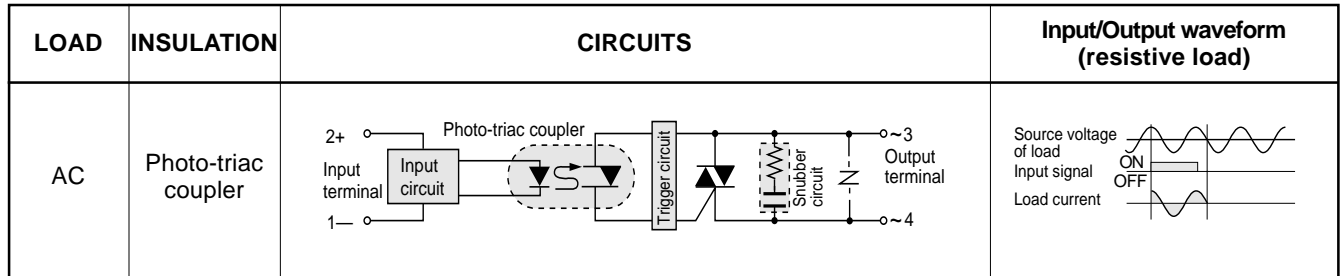
(a)	Series Name	SE : SE Series
(b)	Nominal Voltage (Input side)	3 : 3 VDC 5 : 5 VDC 12 : 12 VDC 24 : 24 VDC
(c)	Load Voltage	A : AC type
(d)	Load Current	015 : 1.5 A 02 : 2.0 A
(e)	Output Protection	Nil : No varistor V : Varistor type (2.0A type only)
(f)	Zero Cross Circuit	F : No zero cross type C : Zero cross type

## ■ SPECIFICATIONS

Item		AC		Remarks
		1.5 A Type	2.0 A Type	
INPUT side	Nominal Voltage (DC)	3 V, 5 V, 12 V, 24 V		
	Operate Range	±20% of nominal voltage		
	Must Operate Voltage	80% of nominal voltage		
	Must Release Voltage	Minimum 1 V (minimum 0.5 V*)		*3 VDC type
	Input Impedance	3 VDC Type	180Ω ±10%	130Ω ±10%
5 VDC Type		470Ω ±10%	330Ω ±10%	
12 VDC Type		1.5 kΩ ±10%	1.0 kΩ ±10%	
24 VDC Type		3.0 kΩ ±10%	2.2 kΩ ±10%	
OUTPUT side	Load Voltage Range	15 to 265 Vrms		
	Maximum Load Current	1.5 Arms	2.0 Arms	see CHARACTERISTIC DATA
	Minimum Load Current	10 mArms		
	1 Cycle Surge Current	50 A (60 Hz)		
	Max. Off-State Leakage Current	0.5 mA rms 1.0 mA rms	1.0 mA rms 2.0 mA rms	(at 100 V rms 60 Hz) (at 200 V rms 60 Hz)
	Max. On-State Voltage Drop	1.2 V rms	1.3 V rms	at maximum load current
Maximum Operate Time		1 ms		
Maximum Release Time		1/2 cycle +1ms		
Insulation Resistance		Minimum 1,000 MΩ (at 500 VDC)		for input-output
Dielectric Strength		2,500 Vrms 1 minute		for input-output
Operating Temperature Range		-30°C to + 85°C		
Storage Temperature Range		-40°C to +100°C		
Case Color		Black		
Weight		Approximately 4.0 g	5.1 g	

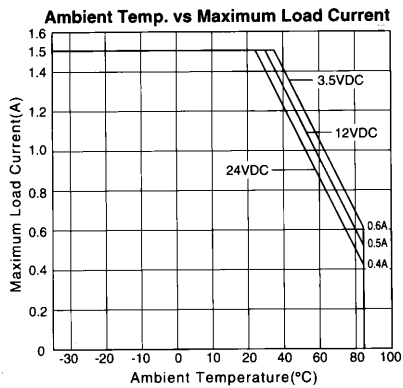
# SE SERIES

## ■ BLOCK DIAGRAM

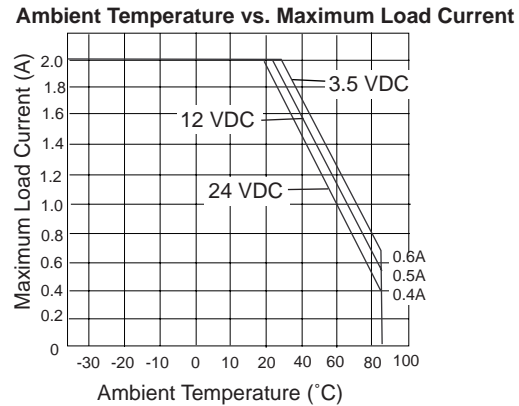


## ■ CHARACTERISTIC DATA

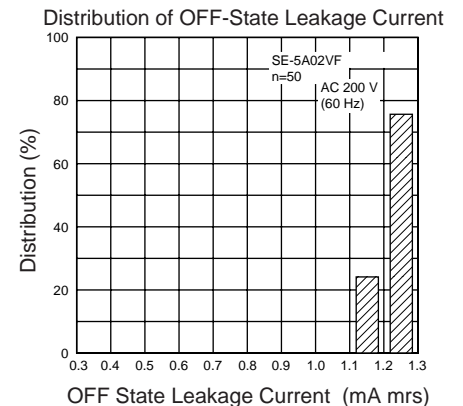
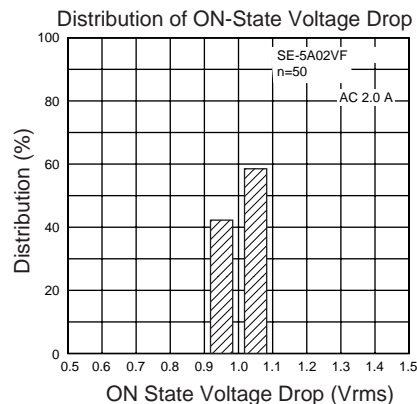
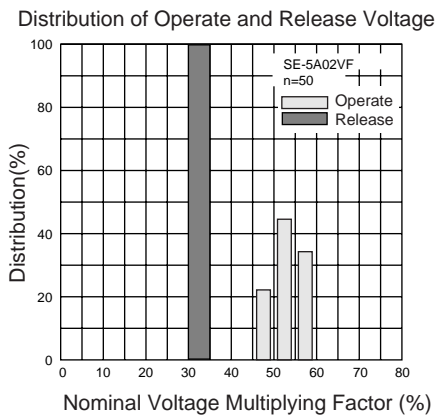
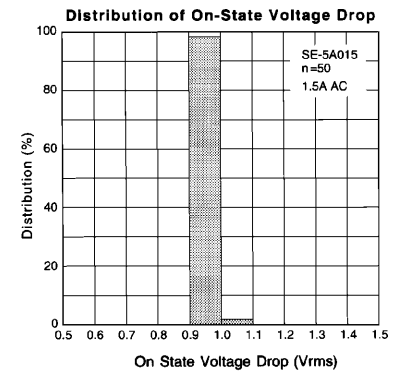
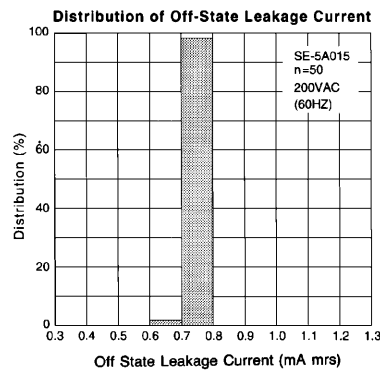
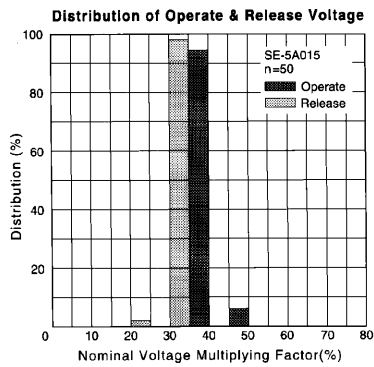
SE- ( )A015 type



SE- ( )A02 type



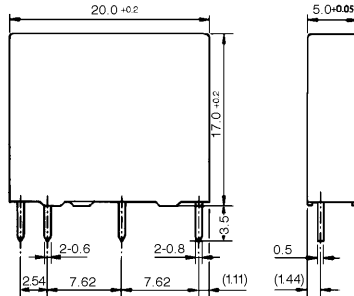
## ■ REFERENCE DATA



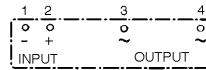
## ■ DIMENSIONS

### ● Dimensions

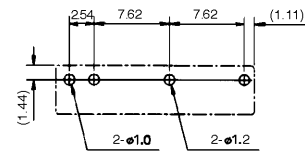
SE- ( ) A015 type



### ● Schematics (BOTTOM VIEW)

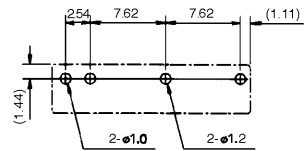
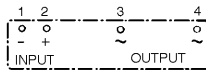
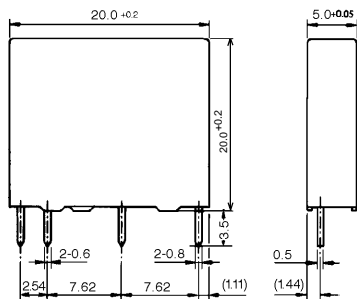


### ● PC board mounting hole layout (BOTTOM VIEW)



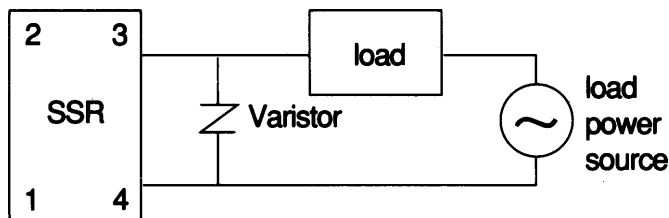
Unit: mm

SE- ( ) A02 type



## ■ NOTES

When large noise and surge are impressed on the load side, there is the possibility of the occurrence of malfunction or damage. In such a case, a varistor should be inserted in the circuit.



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