

Models

Name	Construction	Model	Number of Buttons	Number of Contacts	Color of Button	Model Approval No.	Remark
1-point Pushbutton Switch	Only element With case & cover Dust-proof type Acid-proof type	RC 300X-I RC 300-I RC dp 300-I RC 1g 300-I	1	1×(1a1b)	*1 Any one color of G,R, B, and D is designated	*2	
					Either G or R is designated	▽ 41-1080	
2-point Pushbutton Switch	With case & cover Dust-proof type Acid-proof type	RC 300-II RB dp 300-II RC 1g 300-II	2	2×(1a1b)	Upper.....green Lower.....red	▽ 41-1081	
3-point Pushbutton Switch	With case & cover Dust-proof type Acid-proof type	RC 300-III RC dp 300-III RC 1g 300-III	3	3×(1a1b)	Upper.....green Intermediate..green Lower.....red	▽ 41-1081	For reversible switch

- * 1) G : green R : red B : blue D : dark green
* 2) RC 300X-I requires no model approval number.

SILICON CONTROLLED RECTIFIER ELEMENT, TYPE GSi 1

Fuji Electric's silicon controlled rectifier elements have been available including a total of some 60 models ranging from GSi 5 to GSi 150, thus fully meeting the demands of various customers. Added to this complete line of products is a new one, type GSi 1. This type of element is designed and manufactured to meet the recently increasing demand for small capacity, such as the case of the contactless switch. Fuji Electric recommends the new type as well as the existing types for unmatched features, both in performance and price.

Construction and Ratings

Because of its construction, the type GSi 1 may be used as it is, without being installed on a radiator, so that it does not require as much space as existing elements, which have to be installed on a radiator for operation.

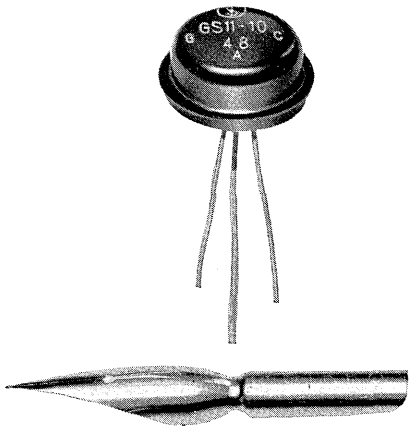
The GSi 1 is conveniently constructed for assembly to a printed circuit board. The rated current is 0.5 amp with an ambient temperature of 50°C. However, as long as the case temperature is kept at 25°C, the element may be operated with a current of up to 1 amp. The forward voltage insulation is available in eight models ranging from 25 to 400 v.

Features

- 1) Small in size and light in weight.
- 2) The reverse voltage insulation is higher than the forward voltage insulation, and is consequently durable.
- 3) Higher reliability obtained through strict tests and quality control.

Usage

The element is widely used in such fields as static contactless switches, dimmer equipment, static Leonard sets (for small scale motor control use), inverters, frequency converters, and automatic control devices.



External view, size compared with an ordinary pen point

Performance List of Type GSi 1

Model		GSi 1 -2	GSi 1 -5	GSi 1 -10	GSi 1 -15	GSi 1 -20	GSi 1 -25	GSi 1 -30	GSi 1 -40
Item									
Repeating Peak Forward Voltage Insulation	v (peak)	25	50	100	150	200	250	300	400
Repeating Peak Reverse Voltage Insulation	v (peak)	38	75	150	225	300	375	450	600
Reverse Direction Surge Break-down Voltage	v (peak) more than	220	220	220	330	440	550	660	880
Rated Ac Input Voltage	v (eff)	14	28	55	85	110	140	165	220
Average Forward Current	amp (mean)	1 (single phase half-wave connection, resistance load, conducting angle 180°, case temperature 25°C) 0.5 (single phase half-wave connection, resistance load, conducting angle 180°, ambient temperature 25°C)							
Average Forward Voltage Drop	v (mean)	0.81 (single phase half-wave connection, resistance load, forward current 0.5 amp, conducting angle 180°)							
1-cycle Surge Current	amp (peak)	20 (at rated load)							
I ² ·t Limit Value	amp ² ·s	1.5 (at rated load)							
Standard Holding Current	ma	5							
Maximum Holding Current	ma	20							
Min. Arcing Gate Voltage	v	0.20 (at -10 to +100°C)							
Max. Arcing Gate Voltage	v	2.5 (at -10 to +100°C)							
Max. Permissible Gate Voltage	v (peak)	10 (forward direction) 5 (reverse direction)							
Max. Arcing Gate Current	ma	20 (at -10 to +100°C)							
Max. Permissible Gate Current	amp (peak)	1							
Average Gate Wattage	w, less than	0.2							
Peak Gate Wattage	w, less than	2							
Thermal Resistance between Junction and Case	°C/w, less than	10							
Preserving Temperature	°C	-40 to +150							
Operating Temperature	°C	-40 to +100							