

# THYRISTOR STACK (AC POWER CONTROL STACK)

TOSHIBA (DISCRETE/OPTO)

39 DE 9097250 0002352 5

## 1. STUD TYPE THYRISTOR STACK

### 3 PHASE

#### SF300J6S1, SF300Q6S2, SF300J6S3

The SF300J6S1, SF300Q6S2 and SF300J6S3 series are 3-phase AC control thyristor stacks, which can simply be composed for 3-phase AC control if a 3-phase gate circuit is connected.

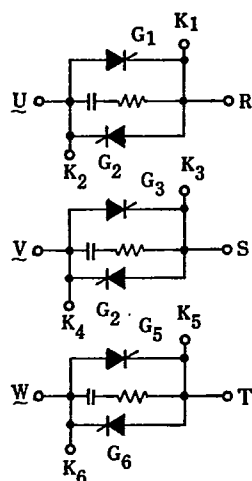
They are most suitable for HF induction heaters, high-voltage control, temperature control, constant current control, motor control and 3-phase AC control.

Current capacities for lines on a 220-V/440-V input voltage are available.

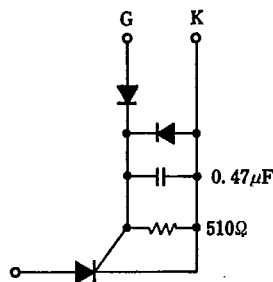
#### MAXIMUM RATINGS

Type	Line Voltage VRMS (Vrms)	Fuse Capacity (A/V)	Repetitive Peak Off-State Voltage and Reverse Voltage VDRM, VRRM (V)	Line Current I <sub>0</sub> (A) Ta = 60°C		Peak One-Cycle Surge Current (Non-Repetitive) I <sub>TSM</sub> (A)	
				Free Convection	Air Velocity 5m/s	1 Cycle	10 Cycle
SF16J6S1	220	—	600	15	26	200	110
SF16Q6S2	440	—	1200				
SF30J6S1	220	—	600	30	55	600	330
SF30Q6S2	440	—	1200				
SF50J6S1	220	—	600	47	100	1000	560
SF50Q6S2	440	—	1200				
SF80J6S1	220	150/250	600	80	154	1600	1300
SF80Q6S2	440	—	1200				
SF150J6S1	220	300/250	600	140	275	3000	1600
SF150Q6S2	440	—	1200				
SF300J6S1	220	500/250	600	175	390	5000	3100
SF300Q6S2	440	—	1200				

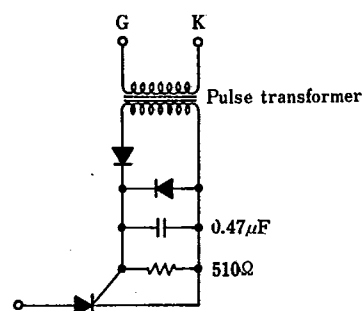
Note : 1. Circuit Diagram



SF [ ] J6S1



SF [ ] Q6S2



The stack with fuse is coded to SF [ ] [ ] 6S3 series.

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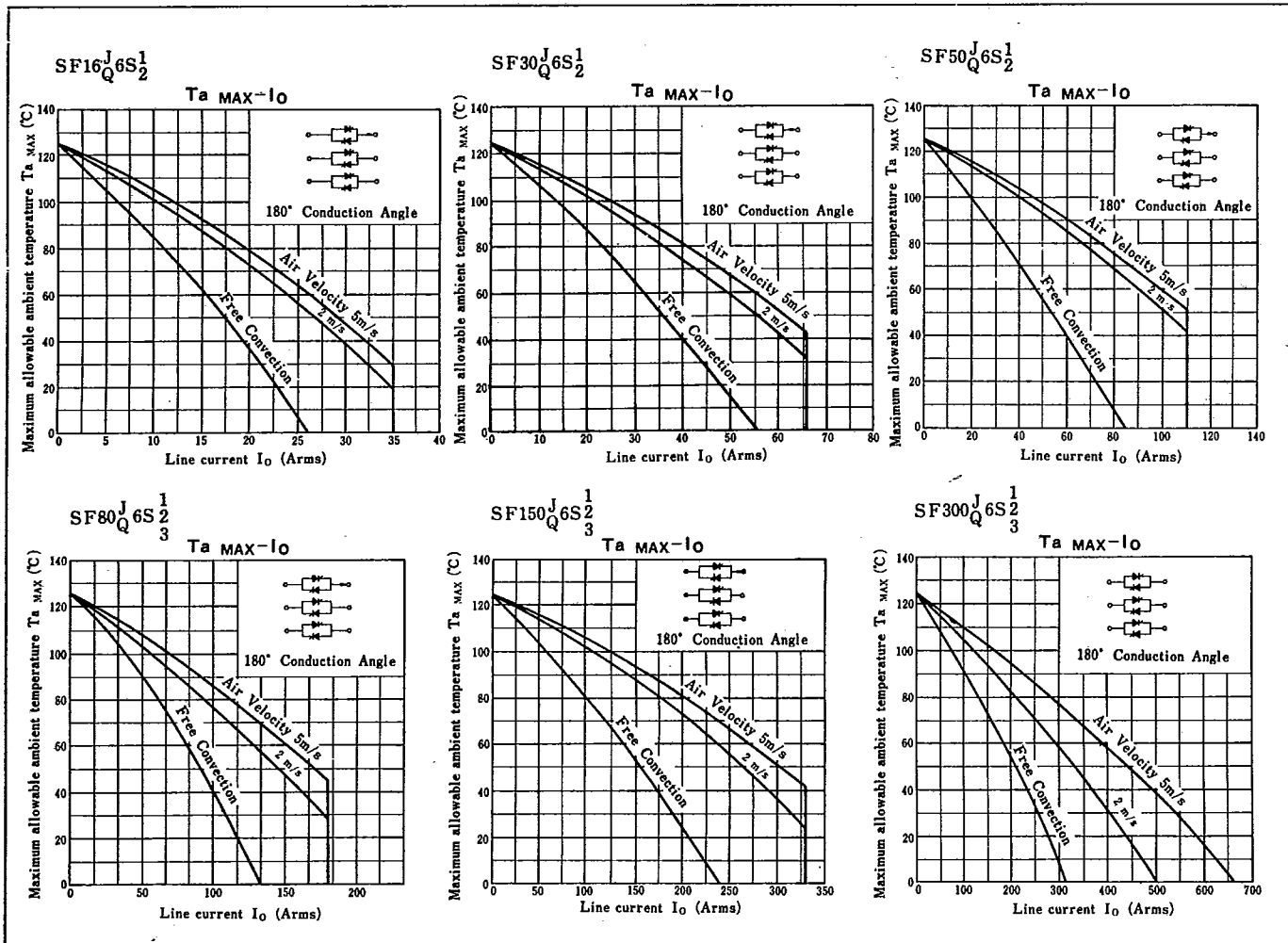
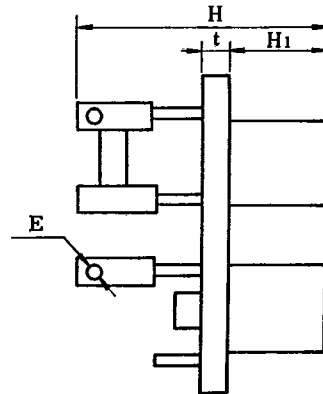
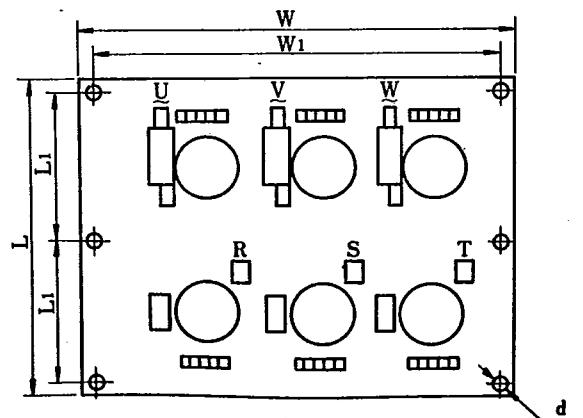


TABLE OF DIMENSIONS

Unit in mm

Type	L(MAX.)	L <sub>1</sub>	t	W(MAX.)	W <sub>1</sub>	H(MAX.)	H <sub>1</sub>	d	E
SF16 <sup>J</sup> <sub>Q</sub> 6S <sup>1</sup> <sub>2</sub>	211	96	6	307	287	170	50	6.5	4.5
SF30 <sup>J</sup> <sub>Q</sub> 6S <sup>1</sup> <sub>2</sub>	212	96	8	307	287	210	100	6.5	6.5
SF50 <sup>J</sup> <sub>Q</sub> 6S <sup>1</sup> <sub>2</sub>	212	96	8	307	287	210	100	6.5	6.5
SF80 <sup>J</sup> <sub>Q</sub> 6S <sup>1</sup> <sub>3</sub>	246	113	8	370	350	230	115	6.5	5.5
SF150 <sup>J</sup> <sub>Q</sub> 6S <sup>1</sup> <sub>3</sub>	316	148	10	430	410	270	130	8.5	8.5
SF300 <sup>J</sup> <sub>Q</sub> 6S <sup>1</sup> <sub>3</sub>	316	148	10	430	410	270	130	8.5	8.5



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## 2. FLAT PACKAGE THYRISTOR STACK

**SINGLE PHASE, 3 PHASE**

**SF400J2H1, SF400Q2H1, SF400J6S1, SF400Q6S1**

Circuit	Line Voltage		Line Current
	220 V	440 V	Free Convection Ta=40°C
Single phase 	SF100J2H1	SF100Q2H1	95 A
	SF250J2H1	SF250Q2H1	115 A
	SF400J2H1	SF400Q2H1	177 A
3 phases 	SF100J6S1	SF100Q6S1	95 A
	SF250J6S1	SF250Q6S1	115 A
	SF400J6S1	SF400Q6S1	177 A

\* Contact TOSHIBA concerning the stack with a cooling fan.

### OUTLINE DRAWING

Unit in mm

