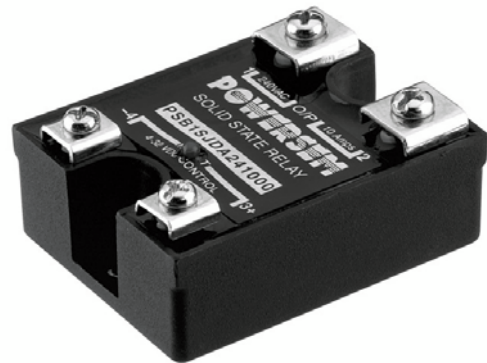


# Single Phase Solid State Relays

## HIGHLIGHTS

- INPUT: AC CONTROL
- OUTPUT: BACK-TO-BACK SCR
- OPTO ISOLATION 2500 VAC (4000 V optional)
- ZERO VOLTAGE TURN-ON or RANDOM TURN-ON
- SAFETY COVER (optional)
- BUILT IN SNUBBER
- CHASSIS MOUNTABLE
- LED INDICATOR SHOWING RELAY 'ON' STATUS
- Weight = 106 g

Series: 1 SJ/K



10 – 40 A

(J: Zero voltage turn-on; K: Random turn-on)

## ELECTRICAL SPECIFICATIONS

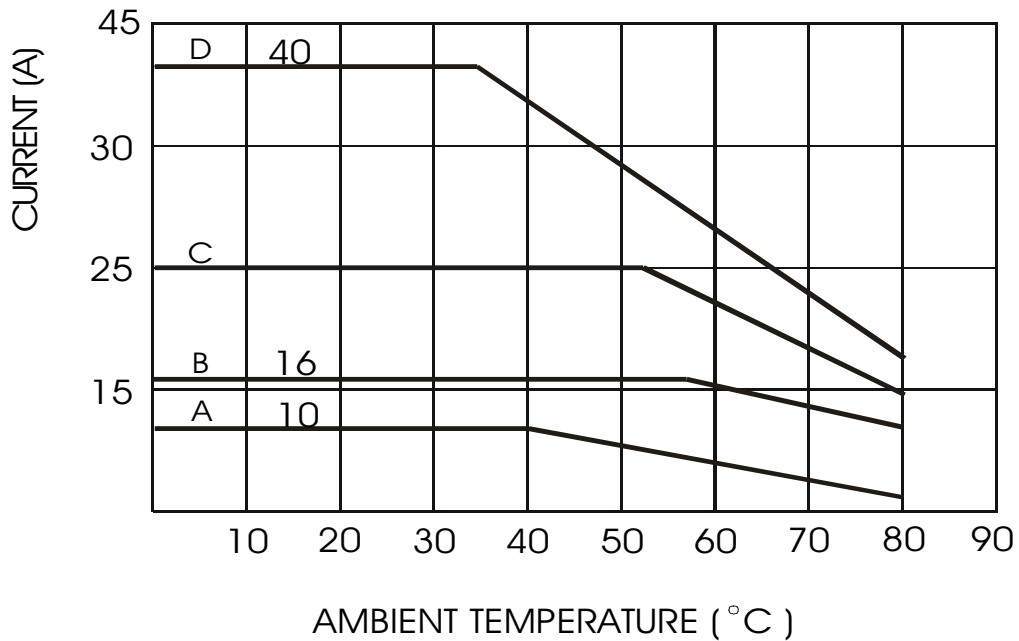
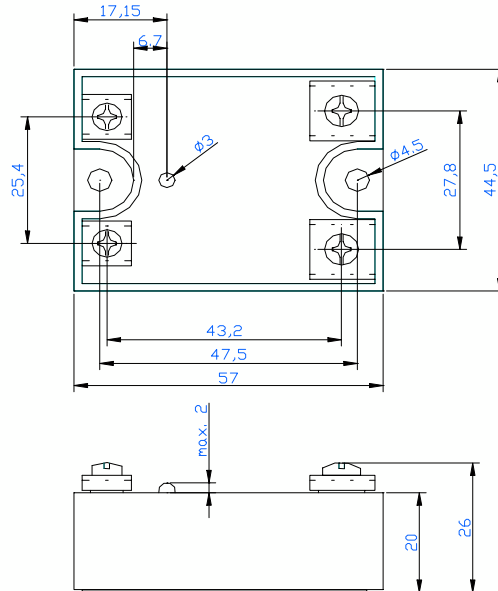
Parameter	Symbol	Type				Unit
		PSB 1 SJAA 241028	PSB 1 SJAA 241628	PSB 1 SJAA 242528	PSB 1 SJAA 244028	
<b>AC CONTROL</b>						
Control voltage range		180-280	180-280	180-280	180-280	Vac
Control current range		9-18	9-18	9-18	9-18	mA
Pick-up voltage		180	180	180	180	Vac
Drop-out voltage		45	45	45	45	Vac
Input resistance		Current regulator				
<b>OUTPUT</b>						
Mains control voltage	$V_{RMS}$	24-240	24-240	24-240	24-240	Vac
Repetitive peak off state voltage	$V_{DRM}$	600	600	600	600	Vpk
RMS on-state current	$I_T$	10	16	25	40	A
Zero turn-on voltage		35	35	35	35	Vac
On-state voltage drop	$V_{TM}$	1.6	1.6	1.6	1.6	Vac
Off-state leakage current @ rated voltage	$I_{DRM}$	10	10	10	10	mA
Peak one cycle surge current (non-rep)	$I_{TSM}$	100	160	500	500	A
Holding current	$I_H$	50	70	120	250	mA
Critical rate of rise of off-state voltage	dv/dt	200	200	200	200	V/ $\mu$ s
Thermal resistance (junction to case)	$R_{thjc}$	2.0	1.6	1.0	0.85	K/W
Frequency range	f	47-63	47-63	47-63	47-63	Hz
Operating temperature	$T_O$	-30 to +80	-30 to +80	-30 to +80	-30 to +80	$^{\circ}$ C
Turn-on time	T-on	40	40	40	40	ms
Turn-off time	T-off	80	80	80	80	ms
Fusing current	$I^2t$	50	128	1250	1250	A <sup>2</sup> s



# Single Phase Solid State Relays

## MECHANICAL SPECIFICATIONS

Dimensions in mm



EXTERNAL HEAT SINK THERMAL RESISTANCE:

$$A = 3,2 \text{ K/W}$$

$$B = 1,0 \text{ K/W}$$

$$C\&D = 0,5 \text{ KW}$$

VALID FOR SERIES: PSB 1 SJK ( 10 A - 40 A )