



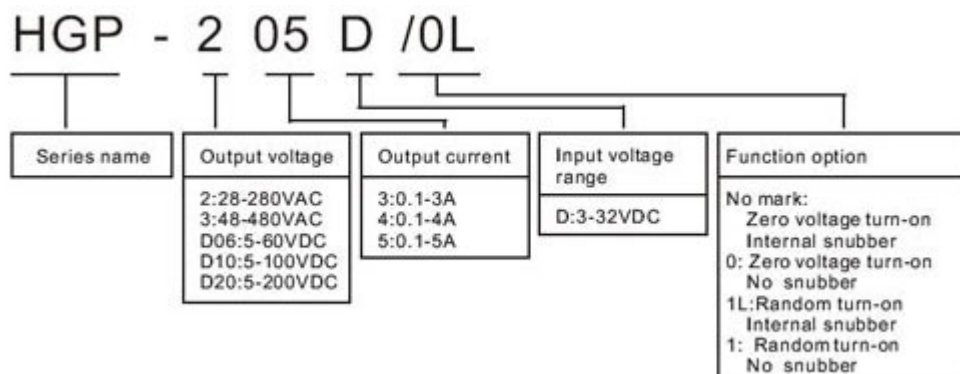
### FEATURES :

- TRIAC output(AC), zero voltage turn-on, zero current turn-off(minimizes EMI/RFI)
- Bipolar transistor output(DC),on-state voltage drop low, switching speedily
- Internal RC snubber
- High dv/dt and high blocking voltage .
- Low Input power Consumption, TTL and CMOS Compatibl.
- Input and output 4000V optically isolated
- Input and output 4000V optically isolated .
- High Surge Rating Allows Lamp and Motor Load Switching.
- 100% tested at rated current , CE compliant .
- PCB Mount, standard modulus .

### Application :

HGP Series AC Solid State Relays, adapting ignition-proof engineering plastic cover, filled with EPOXY, screw thread connection, have the features of hard structure, vibration-proof capability high, input current small convenient to interface with terminals of computer and various digital tele-control circuit. This series products are widely used in the fields of petrochemical equipment, foodstuff producing mechanism, textile and plastic mechanisms, packaging machines, tool numerical control, gymnasium equip. Speciality be the same with canker, aquosity request prevent explode scurvines circumstance, and often switch of occasion.

### SELECTING CODE :



### PRECAUTIONS :

- When controlling AC inductive load, the SSR may be damaged by the high transient voltage and surge current added on the output, so some special clamping devices to control voltage, such as zener diode, varistor .
- When controlling DC inductive load, such as solenoid, motor starter, etc, a continuous current circuit should be used to control the reverse electric motor force. Generally speaking, a simple way is to parallel the load with a diode inversely, but thus will affect the release time of inductive load. A better way is to series a diode with a zener diode inversely or to series a diode with a resistance .
- When controlling a small current(close to Min. load current),a dummy resistance should be paralleled to reduce the rest voltage produced by the surge current on the output.
- When a jointing type relay is mounted, the temperature should be controlled under 260 centigrade degrees and the time will be limited within 5second.
- To avoid the temperature exceeding the allowance, heatsink efficiency and the mounting position should be regarded, suitable space will be left when two or more SSR are mounted .

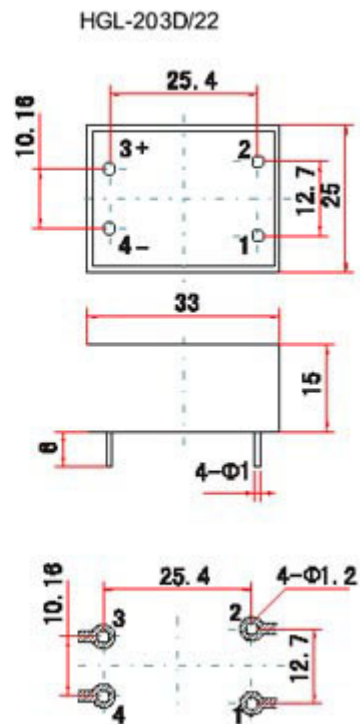
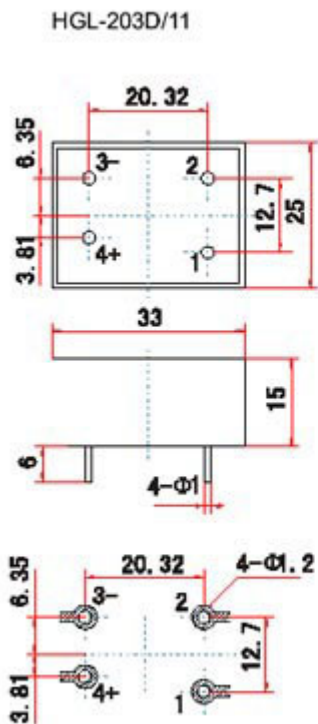
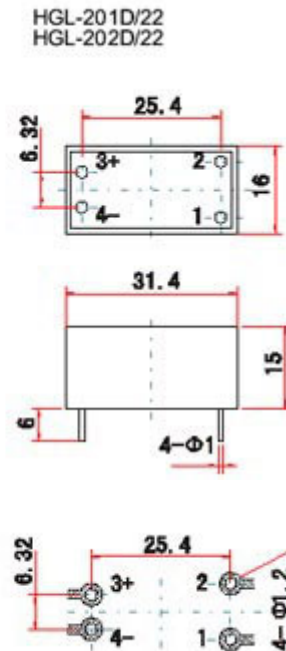
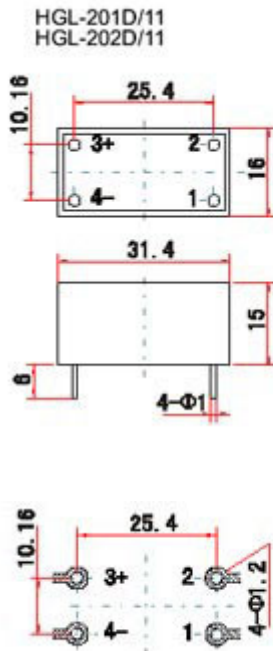
**Output parameters(T=25°C) :**

Output current type	3	4	5	5
Operating voltage range	2:28 280VAC 3:48 480VAC			
Max. Load current	3A	4A	5A	5A
Max. Surge current-Non repetitive (10ms)	80Apk	120Apk	160Apk	20Apk
Max. I t for fusing(10ms)	32A <sup>2</sup> s	72A <sup>2</sup> s	128A <sup>2</sup> s	
Min. Off-state dv/dt	250V/usec	250V/usec	500V/usec	
Max. Over-zero voltage	±35VAC			
Min. Load current	100mA			1mA
Max. On-state voltage drop	1.5VAC@rated current			1.5VDC
Max. Off-state leakage current	5mA,1mA /no RC @rated voltage			0.1mA
Transient over voltage	2:800Vpk 3:1000Vpk			All high 20V
Operating frequency range	47- 63Hz			0-500Hz
Dielectric strength 50Hz 1Min( )	4000VAC input-output 2500VAC input/output-base			
Insulation resistance	1000MQ 500VDC Voltage Test			
Vibration resistance Destructive Functional	117.6mm/s <sup>2</sup> (12G),10-55 Hz double Amplitude of 2 mm 117.6mm/s <sup>2</sup> (12G),10-55 Hz double Amplitude of 2 mm			
Destructive FunctionalShock resistance	Min.980m/s <sup>2</sup> (100G)(5 times each for X,Y,Z axis) Min.980m/s <sup>2</sup> (100G)(4 times each for X,Y,Z axis)			
Max. Capacitance	8pF input-output			
Max. Turn-on time	Zero voltage turn-on	(1/2 cycle of load power)+1msec(DC input) (3/2 cycle of load power)+1msec(AC input)		50usec
	Random turn-on	1msec		
Max. Turn-off time	(1/2 cycle of load power)+1msec(DC input) (3/2 cycle of load power)+1msec(AC input)			50usec
Ambient operating temperature	-30 °C to 80°C			
Ambient storage temperature	-30°C to 120 °C			

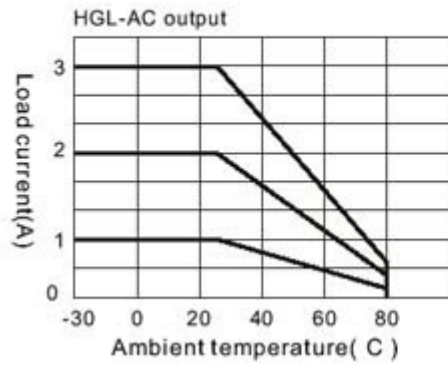
Ambient humidity relative	45% to 85%
Weight typical	≤85g

Dimensions :

Unit:mm  
Tolerance:±0.5



## CURRENT DERATING CURVES



## MAX. SURGE vs DURATION

