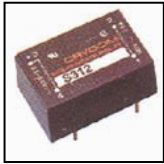


SERIES 3



Product	Control Voltage Range	Load Current	Switching Voltage Type	Turn On	Load Voltage Range
BUY S3012A	3.5-8 Volts DC	0.15-3 Amps RMS	AC	Zero cross	20-140 Volts RMS

SCR output • 3Amp • 120/240
 Vrms • AC Switching • DC
 control • Snubber and snubberless
 versions • Ideal replacement for
 Reed and electromechanical relays.

- ▶ [Specification PDF](#)
- ▶ [Contact Us](#)
- ▶ [Find a Distributor](#)

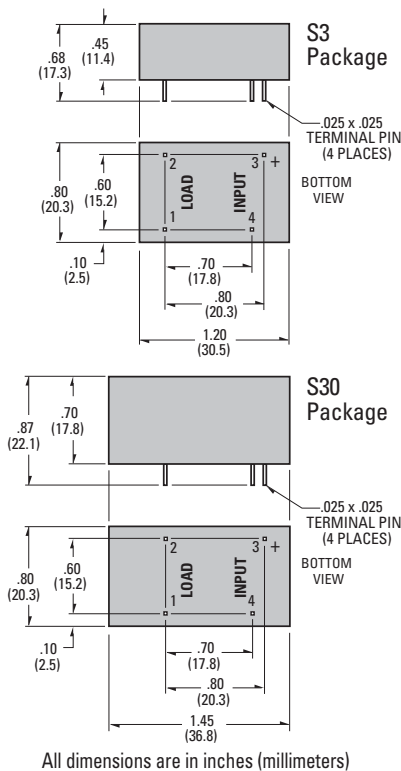
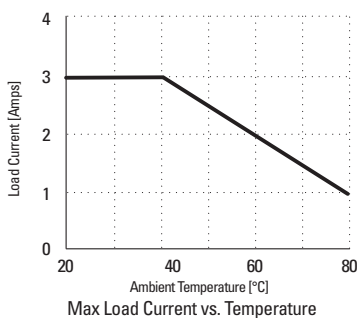
- Compact for High Density PCB Mount
- Small Footprint
- UL, CSA, VDE Approved

These solid state relays combine small size and high ratings in a PC-board-mounted SPST-NO design. Available with (S30 types) or without snubber net-

work (S3 types), Series 3 is an ideal replacement for power reed relays in microprocessor or computer-based logic level systems. Designed for long, reliable service in a multitude of demanding industrial environments.

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

CURRENT DERATING CURVE



MODEL NO.	S312	S3012A	S322	S3022A
INPUT SPECIFICATIONS ①				
Control Voltage Range	3.5-8 Vdc		3.5-8 Vdc	
Nominal Input Impedance	200 Ohm		200 Ohm	
Typical Input Current @ 5 Vdc	20 mA _{dc}		20 mA _{dc}	
Must Turn On Voltage	3.5 Vdc		3.5 Vdc	
Must Turn Off Voltage	1.0 Vdc		1.0 Vdc	
OUTPUT SPECIFICATIONS ①				
Operating Voltage Range (47-63 Hz)	20-140 Vr _{ms}		40-280 Vr _{ms}	
Load Current Range (Arms)	.15-3.0	.15-3.0	.15-3.0	.15-3.0
Transient Over-Voltage	600 V _{pk}		600 V _{pk}	
Max. Surge Current, (16.6ms)	55 A _{pk}		55 A _{pk}	
Min. Off-State dv/dt @ Max. Rated Voltage ③	200 V/μsec		200 V/μsec	
Max. Off-State Leakage @ Rated Voltage	1.0 mA	4.0 mA	1.0 mA	4.0 mA
Max. On-State Voltage Drop @ Rated Current	1.5 V _{pk}		1.5 V _{pk}	
Max. Turn-On Time	1/2 cycle		1/2 cycle	
Max. Turn-Off Time	1/2 cycle		1/2 cycle	
Power Factor (Min.) With Max. Load	0.5		0.5	
GENERAL SPECIFICATIONS				
Dielectric Strength ②	4000 Vr _{ms}			
Insulation Resistance (Min.) @ 500 Vdc ②	10 ⁹ Ohm			
Max. Capacitance	8.0 pF			
Ambient Operating Temperature Range	-30 to 80°C			
Ambient Storage Temperature Range	-30 to 125°C			
MECHANICAL SPECIFICATIONS				
Weight: (typical)	0.6 oz. (0.8 g)			
Encapsulation:	Thermally Conductive Epoxy			

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GENERAL NOTES

- ① All parameters at 25°C unless otherwise specified.
- ② Dielectric and insulation resistance are measured between input and output.
- ③ Off-State dv/dt test method per EIA/NARM standard RS-443.

APPROVALS

UL E116949
CSA LR81689
VDE 10114 UG

