



Bulletin 700-SH — Hockey Puck Relay

- 100 A max. continuous load (output) current with appropriate heat sink
- 264V AC, 530V AC, or 660V AC max. load voltage options
- 3...32V DC, 4...32V DC, 80...130V AC, 200...260V AC, 20...280V AC/22...48V DC control (input) voltage options
- LED indicator for input/logic ON/OFF status monitoring
- Protective cover for added safety

Table of Contents

Product Selection this page
 Accessories..... 9-184
 Specifications..... 9-185
 Approximate
 Dimensions..... 9-188
**Standards Compliance
 and Certifications**
 See page 9-185.

Product Selection

	Input-to-Output Isolation Method	Zero Cross Function	Status Indicator	Output (Load) Max. Continuous Current and Rated Voltage Range†	Rated Input Control Voltage	Cat. No.*
	Optocoupler	Yes	Yes	10 A @ 42...265V AC	3...32V DC	700-SH10JZ24
				10 A @ 42...265V AC	80...130V AC	700-SH10JA12
				10 A @ 42...265V AC	200...260V AC	700-SH10JA22
				10 A @ 42...530V AC	4...32V DC	700-SH10HZ25 (Series B)
				25 A @ 42...530V AC	4...32V DC	700-SH25HZ25 (Series B)
				25 A @ 24...265V AC	3...32V DC	700-SH25GZ24
				25 A @ 24...265V AC	20...280V AC/22...48V DC	700-SH25GA24
				50 A @ 24...265V AC	3...32V DC	700-SH50GZ24
				50 A @ 24...265V AC	20...280V AC/22...48V DC	700-SH50GA24
				50 A @ 42...530V AC	4...32V DC	700-SH50HZ25
				25 A @ 42...660V AC	4...32V DC	700-SH25VZ25
				25 A @ 42...660V AC	20...280V AC/22...48V DC	700-SH25VA24
				50 A @ 42...660V AC	4...32V DC	700-SH50VZ25
				50 A @ 42...660V AC	20...280V AC/22...48V DC	700-SH50VA24
				75 A @ 42...530V AC	4...32V DC	700-SH75HZ25
				75 A @ 42...660V AC	4...32V DC	700-SH75VZ25
				75 A @ 42...530V AC	20...280V AC/22...48V DC	700-SH75HA24
				75 A @ 42...660V AC	20...280V AC/22...48V DC	700-SH75VA24
				100 A @ 42...530V AC	4...32V DC	700-SH100HZ25
				100 A @ 42...530V AC	20...280V AC/22...48V DC	700-SH100HA24
				100 A @ 42...660V AC	4...32V DC	700-SH100VZ25
				100 A @ 42...660V AC	20...280V AC/22...48V DC	700-SH100VA24
		Yes	No	5A @ 3...60V DC	3...32V DC	700-SH5FZ24
		Yes	Yes	25 A @ 90...280V AC	4...20 mA DC	700-SH25WA25
				50 A @ 90...280V AC	4...20 mA DC	700-SH50WA25

* All catalog numbers are Series A unless noted.

⚙ This type is also called Phase Angle 0.

† When used with heat sink.

Control/Input Ratings

Cat. No.	Operating Voltage	Input Current @ Max. Voltage	Voltage Level Pickup Voltage	Drop-Out Voltage
700-SH10J...	3...32V DC	12 mA	2.75V DC max.	1.2V DC min.
	80...130V AC	13 mA	70V AC max.	30V AC min.*
	200...280V AC	13 mA	190V AC max.	90V AC min.
700-SH_ _ H...	4...32V DC	12 mA	4V DC max.	1V DC min.
	20...280V AC/22...48V DC	20 mA	18V AC/DC	6V AC/DC
700-SH_ _ G...	3...32V DC	12 mA	2.5V DC	1.2V DC
	20...280V AC/22...48V DC	20 mA	-32V DC	6V AC/DC
700-SH_ _ V...	4...32V DC	12 mA	3.5V DC	1.2V DC
	20...280V AC/22...48V DC	20 mA	18V AC/DC	6V AC/DC
700-SH_ _ W...	Current Control	4...20 mA	—	—
700-SH_ _ F...	3...32V DC	12 mA	3V DC max.	1.0V DC

* When specified heatsink is used.

Output Ratings

Cat. No.	Load Voltage Range	Applicable Load Current with Heat Sink [A]*
700-SH5FZ24	3...60V DC	0.001...5 A DC
700-SH10J...	42...265V AC	0.15...10
700-SH10H...	42...530V AC	0.15...10
700-SH25G...	24...265V AC	0.15...25
700-SH25H...	42...530V AC	0.15...25
700-SH25V...	42...660V AC	0.15...25
700-SH25W...	90...280V AC	0.15...25
700-SH50G...	24...265V AC	0.15...50
700-SH50H...	42...530V AC	0.15...50
700-SH50V...	42...660V AC	0.15...50
700-SH50W...	90...280V AC	0.15...50
700-SH75H...	42...530V AC	0.15...75
700-SH75V...	42...660V AC	0.15...75
700-SH100H...	42...530V AC	0.15...100
700-SH100V...	42...660V AC	0.15...100

* AC unless indicated.

Characteristics

Description	Cat. Nos. 700-SH10, 25, 50 (not including 700-SH_ _W)	Cat. Nos. 700-SH75, 100
Pick-up Time	1/2 of load power source cycle time (DC input) 1 of load power source cycle time (AC input)	
Drop-out Time	1/2 of load power source cycle time (DC input) 2 of load power source cycle time (AC input)	
Output ON Voltage Drop	1.6V (RMS) max.	
Output Leakage Current	<3 mArms 100 MΩ min (@ 500V DC)	
Insulation Resistance	100 MΩ min. (at 500V DC)	
Dielectric Strength	>4000 VACrms	
Vibration Resistance	Malfunction: 10...55 Hz, 1.5 mm double amplitude	
Shock Resistance	Malfunction: 1000 m/s²	
Ambient Temperature	Operating: -20...+70 °C with no icing or condensation Storage: -40...+100 °C with no icing or condensation	
Ambient Humidity	0...95% no condensing	
Standards Compliance	UL 508, CSA C22.2 No. 14, EN/IEC 60947-1, -4-2, -4-3, EN 61000-6-2, EN 61000-6-4	
Certifications	cURus Recognized (File No. E14843, Guide NPNT2), CSA Certified (File No. 240924)	
Weight	Approx. 60 g	Approx. 100 g

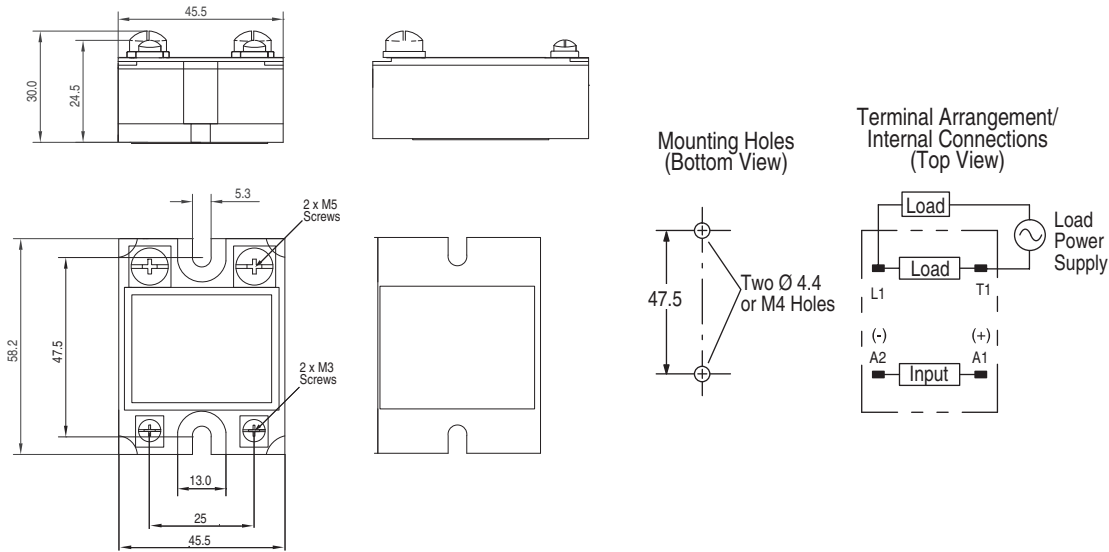
Bulletin 700-SH

Solid-State Relays

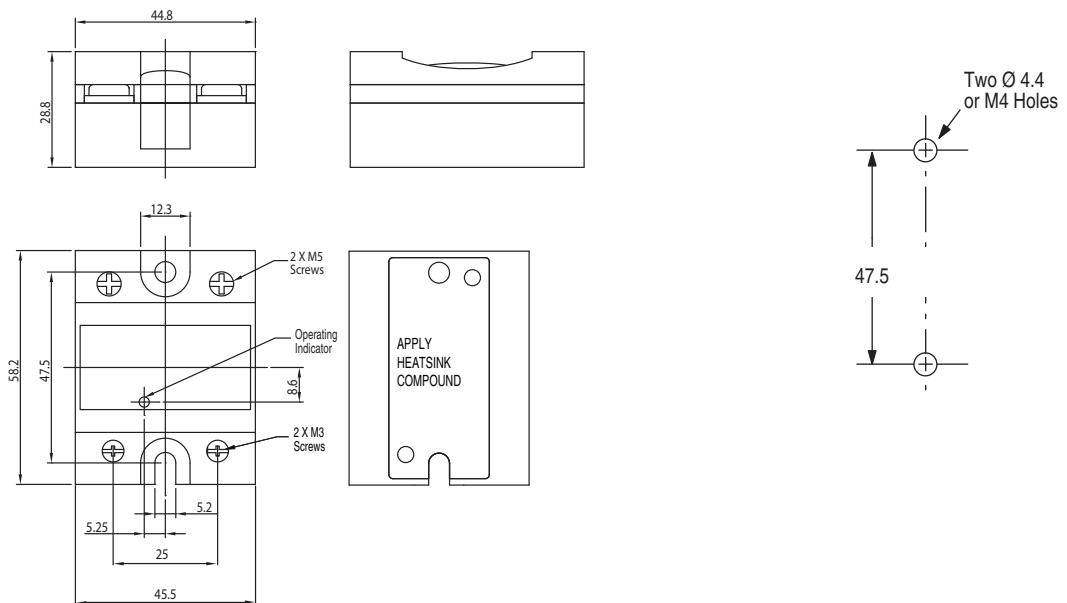
Approximate Dimensions

Mounting Considerations*†§♣

All units are in mm's unless otherwise indicated. To convert to inches multiply by 0.0394. Dimensions are not intended for manufacturing purposes.



Cat. No. 700-SH5F...



Cat. No. 700-SH10, -SH25, -SH50, -SH75, -SH100

- * The proper mounting orientation of the heat sink is so the heat fins run perpendicular to the floor (vertical) to maximize ventilation flow. If the fins do not run perpendicular to the floor, a 30% current derating is required.
- † When attaching a heat sink to Bulletin 700-SH, apply a thin layer of heat conductive grease (approximately 0.002 in. thick) on the heat sink to maximize heat transfer between the SSR and the heat sink. Recommended types: Silicon based, Dow Corning 340, Toshiba YG6240; Non-silicon based, AOS company type 53300 (Cat. No. 46801-010-01).
- § Tighten the SSR panel/heat sink mounting screws to a torque of 0.78...0.98 N•m (6.9...8.7 lb•in).
- ♣ Tighten the SSR terminal wiring screws as follows M4: 0.98...1.37 N•m (8.67...12.12 lb•in), M5: 1.57...2.35 N•m (13.89...20.8 lb•in).