

SPST-N.O., 2.5 TO 25 AMPS

UL Recognized
File No. E52197

168986

FEATURES

- SMALL PACKAGES
- EIGHT DIFFERENT PACKAGES
- OPTICALLY ISOLATED.
- ZERO CROSS SWITCHING
- INTERNAL SNUBBER

- IDEAL FOR TIGHT DESIGNS
- WIDE CHOICE OF DESIGN OPTIONS
- INPUT ISOLATED FROM OUTPUT
- REDUCED CURRENT SURGES FOR MOST LOADS
- EXCELLENT TRANSIENT PROTECTION

DC INPUT-AC OUTPUT

MANUFACTURED UNDER ISO 9002

MAX. LOAD CURRENT	CONTROL VOLTAGE RANGE	NOMINAL LOAD VOLTAGE	DESCRIPTION AND FEATURES	STYLE
2.5 A	3-30 or 6-30 VDC	24, 120 or 240 VAC	MINIATURE PRINTED CIRCUIT MOUNT RELAY, ONLY 0.500" HIGH	H
3 A	3-32 or 6-32 VDC	24, 120 or 240 VAC	SINGLE IN - LINE PACKAGE, USES ONLY 0.680 SQ. INCHES BOARD AREA	V
4 A	3-30 or 6-30 VDC	24, 120 or 240 VAC	COMPACT RELAY, PRINTED CIRCUIT MOUNT	F
NEW 5 A	3-32 VDC	24 to 280 VAC	SINGLE IN-LINE PACKAGE, USES ONLY 0.680 SQ. INCHES BOARD AREA	V
6 A	3-30 or 6-30 VDC	120 or 240 VAC	LOW PROFILE RELAY, PANEL OR PRINTED CIRCUIT MOUNT	L
6 A	3-30 or 6-30 VDC	120 or 240 VAC	COMPACT RELAY, PANEL OR PRINTED CIRCUIT MOUNT	M
6 A	3-30 or 6-30 VDC	120 or 240 VAC	COMPACT RELAY, MEETS FIT/FUNCTION REPLACEMENTS FOR LARGER CLASS 6 STYLE RELAYS, QUICK CONNECT TERMINALS	N
6 A	3-30 or 6-30 VDC	120 or 240 VAC	COMPACT RELAY, MEETS FIT/FUNCTION REPLACEMENTS FOR LARGER CLASS 6 STYLE RELAYS, SCREW TERMINALS	S
10 A	3-30 or 6-30 VDC	120 or 240 VAC	COMPACT RELAY, PANEL OR PRINTED CIRCUIT MOUNT 10 AMP	M
12 A	3-30 or 6-30 VDC	120 or 240 VAC	COMPACT RELAY, MEETS FIT/FUNCTION REPLACEMENTS FOR LARGER CLASS 6 STYLE RELAYS, QUICK CONNECT TERMINALS	N
12 A	3-30 or 6-30 VDC	120 or 240 VAC	COMPACT RELAY, MEETS FIT/FUNCTION REPLACEMENTS FOR LARGER CLASS 6 STYLE RELAYS, SCREW TERMINALS	S
25 A	3-30 VDC	120 or 240 VAC	HIGH OUTPUT VERSION OF ABOVE STYLE "S"	S

DC INPUT-DC OUTPUT

MAX. LOAD CURRENT	CONTROL VOLTAGE RANGE	NOMINAL LOAD VOLTAGE	DESCRIPTION AND FEATURES	STYLE
3 A	3-15 or 9-30 VDC	3 to 60 VDC	SINGLE IN - LINE PACKAGE, USES ONLY 0.680 SQ. INCHES BOARD SPACE	V
3 A	3-15 or 9-30 VDC	3 to 60 VDC	COMPACT RELAY, PRINTED CIRCUIT MOUNT	F
5 A	3-15 VDC	3 to 60 VDC	COMPACT RELAY, MEETS FIT/FUNCTION REPLACEMENTS FOR LARGER CLASS 6 STYLE RELAYS, QUICK CONNECT TERMINALS	N
5 A	3-15 VDC	3 to 60 VDC	COMPACT RELAY, MEETS FIT/FUNCTION REPLACEMENTS FOR LARGER CLASS 6 STYLE RELAYS, SCREW TERMINALS	S
NEW 5 A	3-32 VDC	3 to 60 VAC	SINGLE IN-LINE PACKAGE, USES ONLY 0.680 SQ. INCHES BOARD AREA	V

ORDERING CODE

70S2- **04-** **D-** **03-** **V**

CLASS: _____

CONTROL VOLTAGE: _____

01 = 3 - 15 VDC, DC/DC RELAYS
 02 = 9 - 30 VDC, DC/DC RELAYS
 03 = 3 - 30 VDC, 25 A S PACK
 04 = 3 - 30 VDC (OR 32 VDC), DC/AC RELAYS
 05 = 6 - 30 VDC (OR 32 VDC), DC/AC RELAYS

LOAD VOLTAGE RANGE: _____

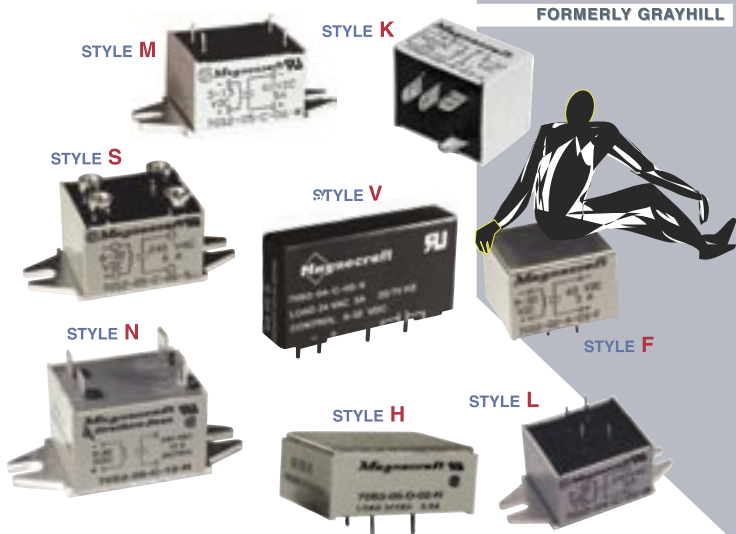
A = 3-60 VDC B = 120 VAC
 C = 240 VAC D = 24 VAC

MAX CURRENT RATING _____

02 = 2.5 A 04 = 4 A 06 = 6 A 12 = 12 A
 03 = 3 A 05 = 5 A 10 = 10A 25 = 25 A

PACKAGE STYLE _____

F, H, L, M, N, S OR V.



70S2 SERIES SOLID STATE "F" & "M" STYLE RELAYS



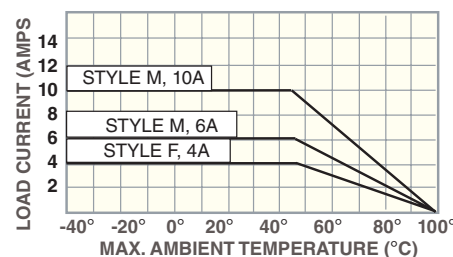
DC/AC, SPST-N.O. 3, 4, 6 & 10 AMPS



GENERAL SPECIFICATIONS (@ 25°C)

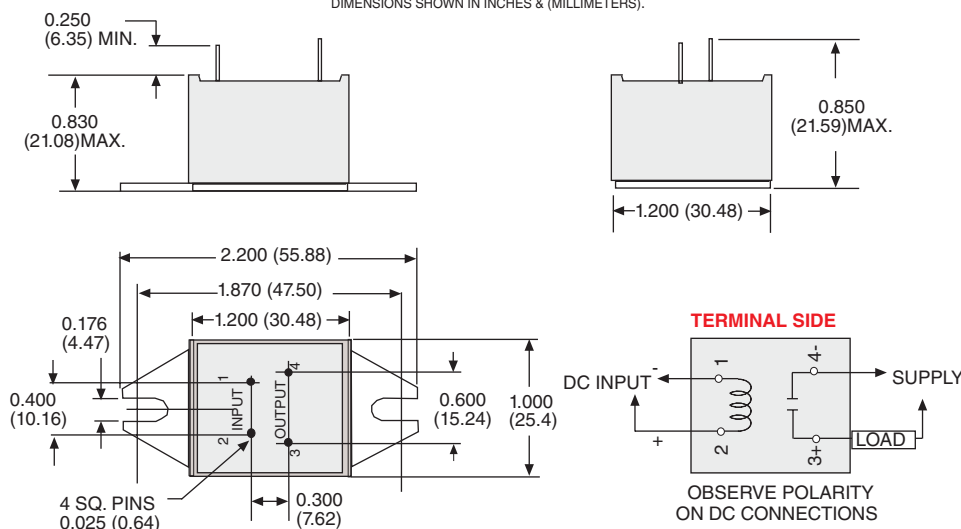
INPUT CHARACTERISTICS	70S2-04-B	70S2-05-B	70S2-04-C	70S2-05-C	70S2-01-A	70S2-02-A
Style:						
Control Voltage Range:	3 - 30 VDC	6 - 30 VDC	3 - 30 VDC	6 - 30 VDC	3 - 15 VDC	9 - 30 VDC
Typical Input Current:	7.0 - 16 mA	6.0 - 10 mA	7.0 - 16 mA	6.0 - 10 mA	5 - 40 mA	5 - 17 mA
Must Release Voltage:	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC
Maximum Reverse Control Voltage:	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC
OUTPUT CHARACTERISTICS						
Load Voltage Range:	24 - 140 VAC	24 - 140 VAC	24 - 280 VAC	24 - 280 VAC	3 - 60 VDC	3 - 60 VDC
Rated Load Current :	4 & 6 Amp 10 Amp	4 & 6 Amp 10 Amp	4 & 6 Amp 10 Amp	4 & 6 Amp 10 Amp	3 Amps	3 Amps
Maximum off-State Voltage dv/dt:	300 V/u Sec Typ					
Minimum Load Current:	75 mA 100 mA	75 mA 100 mA	75 mA 100 mA	75 mA 100 mA	100 mA	100 mA
Non-Repetitive Surge Current (1 Cycle):	60 Amp 110 Amp	60 Amp 110 Amp	60 Amp 110 Amp	60 Amp 110 Amp	-	-
Maximum Off State Leakage Current (Rms):	6 mA	6 mA	6 mA	6 mA	10 uA	10 uA
Typical On-State Voltage Drop(Rms):	1.6	1.6	1.6	1.6	1.2 VDC	1.2 VDC
Minimum Peak Blocking Voltage:	400 V	400 V	600 V	600 V	105 VDC	105 VDC
Operating Frequency Range:	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	DC	DC
Maximum Turn - On Time:	8.3 mS	8.3 mS	8.3 mS	8.3 mS	75 uS	75 uS
Maximum Turn - Off Time:	8.3 mS	8.3 mS	8.3 mS	8.3 mS	500 uS	500 uS
MISCELLANEOUS CHARACTERISTICS						
Dielectric Strength (Input/Output/Base):	3000 V rms.	3000 V rms.	3000 V rms.	3000 V rms.	2500 V rms.	2500 V rms
Insulation Resistance:	100 megohms minimum @ 500 VDC					
Operating Temperature Range:	-40°C to +100°C					
Storage Temperature Range:	-40°C to +125°C					
Weight:	35 grams approx.					

Figure 1: Maximum Continuous Current vs. Ambient Temperature



OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



STANDARD PART NUMBERS	LOAD VOLTAGE RANGE	RATED LOAD CURRENT
70S2-04-B-04-F	24 - 140 VAC	4 AMPS
70S2-05-B-04-F	24 - 140 VAC	4 AMPS
70S2-04-C-04-F	24 - 280 VAC	4 AMPS
70S2-05-C-04-F	24 - 280 VAC	4 AMPS
70S2-04-B-06-M	24 - 140 VAC	6 AMPS
70S2-05-B-06-M	24 - 140 VAC	6 AMPS
70S2-04-B-10-M	24 - 140 VAC	10 AMPS
70S2-05-B-10-M	24 - 140 VAC	10 AMPS
70S2-04-C-06-M	24 - 280 VAC	6 AMPS
70S2-05-C-06-M	24 - 280 VAC	6 AMPS
70S2-04-C-10-M	24 - 280 VAC	10 AMPS
70S2-05-C-10-M	24 - 280 VAC	10 AMPS
70S2-01-A-03-F	3 - 60 VDC	3 AMPS
70S2-02-A-03-F	3 - 60 VDC	3 AMPS



CONSULT FACTORY FOR OTHER CONFIGURATIONS.