

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:

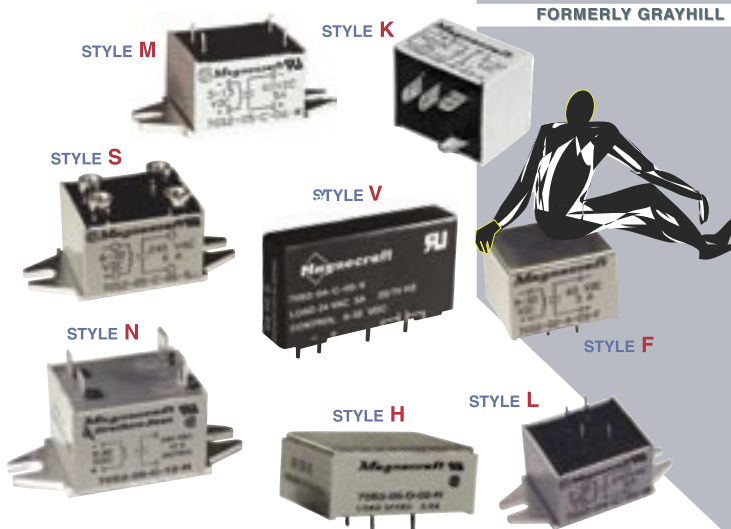
A = 3-60 VDC B = 120 VAC
C = 240 VAC D = 24 VAC

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 "K" STYLE RELAY

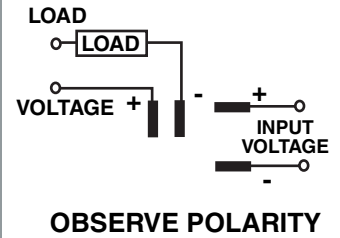


DC/AC, SPST-N.O., 4 AMPS

WIRING DIAGRAM
(VIEWED FROM PIN END)

UL US
UL Recognized
File No. E52197

CS
168986



GENERAL SPECIFICATIONS (@ 25°C)

INPUT CHARACTERISTICS

Style:	70S2-04-B	70S2-04-C	70S2-04-D	70S2-04-B	70S2-05-C	70S2-05-D	70S2-01-A	70S2-02-A
Control Voltage Range:	3 - 30 VDC	3 - 30 VDC	3 - 30 VDC	6 - 30 VDC	6 - 30 VDC	6 - 30 VDC	3 - 15 VDC	9 - 30 VDC
Typical Input Current:	1.0 -17 mA	1.0 - 6.0 mA	1.0 -17 mA	1.0 -6.0 mA	1.0 -17 mA	1.0 - 6.0 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	1.0 VDC	2 VDC
Max. Reverse Control Voltage:	5 VDC	5 VDC	5 VDC	5 VDC	5 VDC	5 VDC	5 VDC	5 VDC

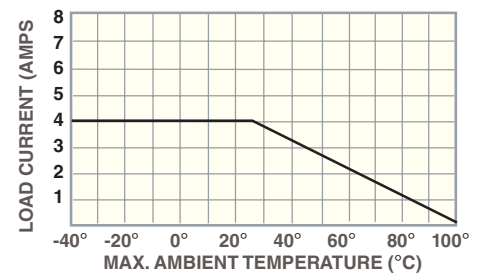
OUTPUT CHARACTERISTICS

Load Voltage Range:	24 -140 VAC	24-280 VAC	8 - 50 VAC	24 -140 VAC	24 - 280 VAC	8 - 50 VAC	3 - 60 VDC	3 - 60 VDC
Rated Load Current :	4 Amp	4 Amp	4 Amp	4 Amp	4 Amp	4 Amp	3 Amp	3 Amp
Maximum off-State Voltage dv/dt:	300 V/u Sec							
Minimum Load Current:	75 mA	75 mA	75 mA	75 mA	75 mA	75 mA	100 mA	100 mA
Non-Repetitive Surge Current (1 Cycle):	60 Amp	60 Amp	60 Amp	60 Amp	60 Amp	60 Amp	7 Amp-1sec	7 Amp-1sec
Maximum Off State Leakage Current (Rms):	6 mA	6 mA	3 mA	6 mA	6 mA	6 mA	10 uA	10 uA
Typical On-State Voltage Drop (Rms):	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V	1.2 V	1.2 V
Minimum Peak Blocking Voltage:	400 V	600 V	200 V	400 V	600 V	200 V	105 V	105 V
Operating Frequency Range:	25 to 70 Hz	25 to 70 Hz	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	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	8.3 mS	8.3 mS	500 uS	500 uS

MISCELLANEOUS CHARACTERISTICS

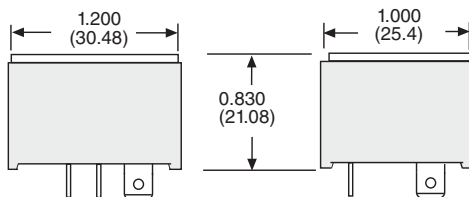
Dielectric Strength (Input/Output/Base):	3000 V rms. Min.
Insulation Resistance:	100 megohms minimum @ 500 VDC
Operating Temperature Range:	-40°C to +100°C
Storage Temperature Range:	-40°C to +125°C
Weight:	40 grams approx.

Figure 1: Maximum Continuous Current vs. Ambient Temperature

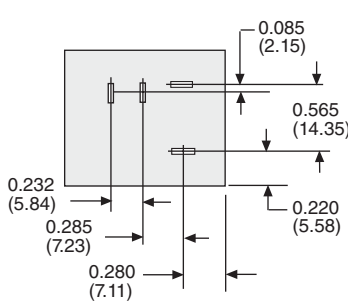


OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



TERMINAL BOTTOM VIEW



QUICK CONNECT
TERMINALS

Mating Sockets

70-459-1: SCREW/DIN

See Section 7

STANDARD PART NUMBERS	LOAD VOLTAGE RANGE	RATED LOAD CURRENT
70S2-04-B-04-K	24 - 140 VAC	4 AMPS
70S2-04-C-04-K	24 - 280 VAC	4 AMPS
70S2-04-D-04-K	8 - 50 VAC	4 AMPS
70S2-05-B-04-K	24 - 140 VAC	4 AMPS
70S2-05-C-04-K	24 - 280 VAC	4 AMPS
70S2-05-D-04-K	8 - 50 VAC	4 AMPS
70S2-01-A-03-K	3 - 60 VDC	3 AMPS
70S2-02-A-03-K	3 - 60 VDC	3 AMPS

CONSULT FACTORY FOR OTHER CONFIGURATIONS.

9/04