Ratings

ERS—DPDT, 2 form C contacts,
2 amp @ 28VDC
S—DPDT, 2 form C contacts,
2 amp @ 28VDC

Description

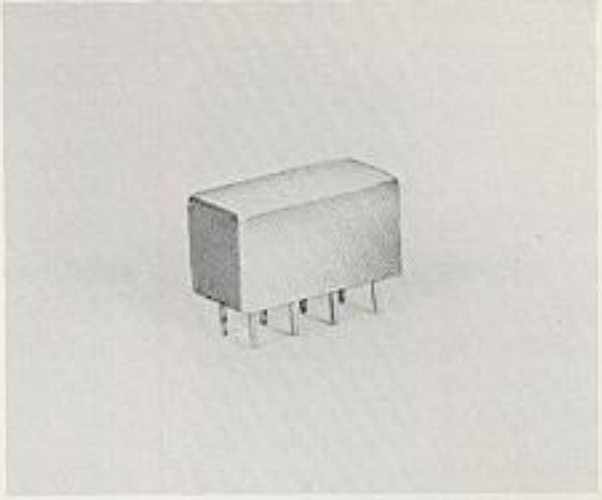
Reliability by design
Complete welded construction
Balanced armature
High contact force
Bifurcated contacts
Low profile, high density packaging
Mounting versatility
Established reliability
(data available upon request)
Weight: 0.3 ounce maximum
Terminals: Plug-in, printed circuit,
hook type, or 3" weldable leads
Enclosure: Hermetically sealed by welding

Performance Data

Operate Time (at +25°C):
4ms maximum at nominal coil voltage
Release Time (at +25°C):
4ms maximum at nominal coil voltage

Initial Contact Resistance:
0.05 ohms maximum
Insulation Resistance:
1000 megohms minimum
Contact Arrangements: 2 form C
Contact Ratings:
ERS ratings per MIL-R-39016
Non-inductive and low level
Type 1: 2 amp @ 28VDC
0.3 amp @ 115VAC, 60 to 400Hz
(1ϕ, case grounded)
Type 2: 2 amp @ 28VDC
0.1 amp @ 115VAC, 60 to 400Hz
(1ϕ, case grounded)
Inductive
Type 1: 0.75 amp @ 28VDC
Type 2: 0.5 amp @ 28VDC
"S" Series: same as noted above for Type 1
Higher AC ratings available—
consult factory.

Dielectric Strength
1000V rms at sea level
500V rms between open contacts,
between coil terminals and case
350V rms at 80,000 feet.



Vibration: 5 to 28Hz at 0.5 inch double amplitude, 28 to 2000Hz at a constant 20g, 28 to 3000Hz at 30g available on request
Shock: 50g operational
Ambient Temperature: −65°C to +125°C

Approvals

MIL-R-39016/6 approved and
MIL-R-5757 as applicable.

Type Designation and Coil Data
DC Resistance—Standard Tolerance ± 10%

ER Designation (MIL-R-39016/6)	Nominal DC Coil Data			Max. Pick-up Voltage		Drop-out Voltage @ +25°C		Drop-out Voltage @ +125°C	
	Volts	Amps	Ohms	@ +25°C	@ +125°C	Min	Max	Min	Max
ERS6 A1 -6VDC-M1	6.0	.150	40	3.2	4.5	.35	2.0	.25	2.9
ERS6 A1 -12VDC-M1	12.0	.075	160	6.4	8.6	.70	4.0	.50	5.8
ERS6 A1 -26.5VDC-M1	26.5	.038	700	13.5	18.0	1.5	8.0	1.0	14.0

S Designation	Nominal DC Coil Data			Max. Pick-up Voltage		Drop-out Voltage @ +25°C
	Volts	Amps	Ohms	@ +25°C	@ +125°C	Minimum
S6H3 - 6VDC	6.0	.172	35	3.2	4.4	.3
S6H3 - 12VDC	12.0	.085	160	6.2	8.6	.6
S6H3 - 26.5VDC	26.5	.038	700	13.5	18.0	1.0
S6H3 - 48VDC	48.0	.020	2300	26.0	36.0	1.5

Note: for low level switching, use SL prefix instead of S.
Dimensions, Terminal and Mounting Variations on next page.
Other coils available. Consult factory.

Ordering Information

□ □ □ □ - □ □ □
I II III IV V VI VII

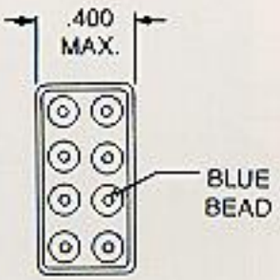
I. Type ERS, S or SL
II. Contact type (6-DPDT)
III. Mounting variation (A, B, C, D, H or O).
IV. Terminal variation (1, 2 or 3).
V. Coil voltage
VI. Reliability level (M or L).
VII. Contact rating (1 or 2).

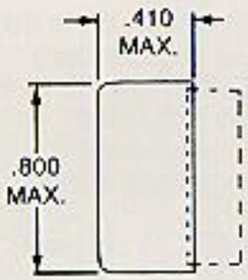
Example #1: ERS6B3-26.5VDCM1 denotes an ERS relay—DPDT—hook pin terminals—flange mounting (single hole)—26.5 volts DC (coil)—M reliability—1 military contact rating.

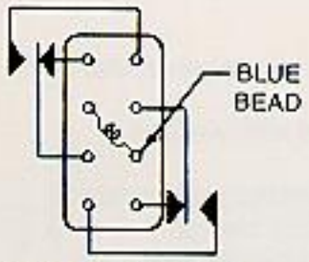
Example #2: S6A1-12VDC denotes an S relay—DPDT—straight pin terminals—no mounting bracket—12 volts DC (coil)

Note: See military cross-reference, page 15.

Dimensions & Schematics



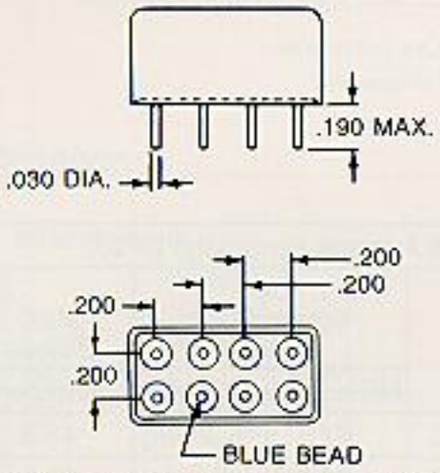




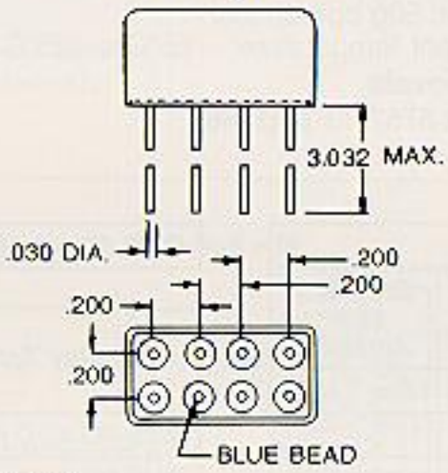
CIRCUIT DIAGRAM
UNENERGIZED

Terminal Variations

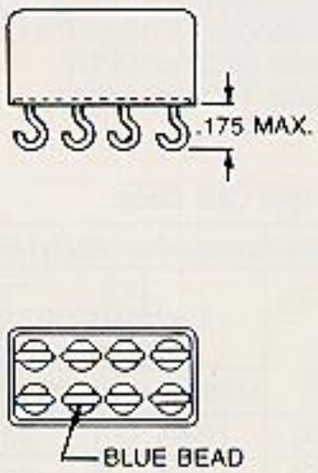
1. Straight pins



2. 3" long leads

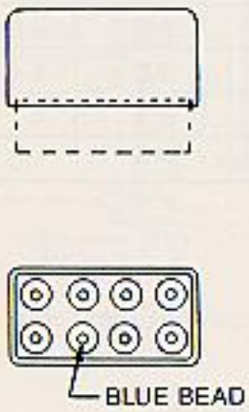


3. Hook pins

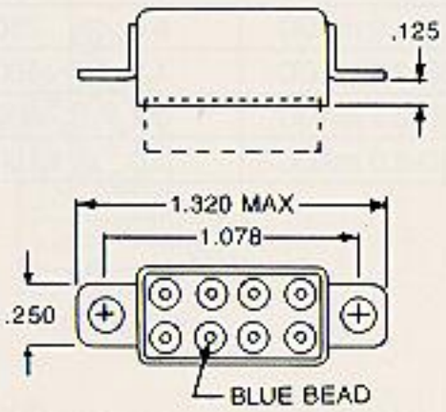


FOR PRINTED CIRCUIT APPLICATIONS MATES WITH ARMEL, VIKING OR ANY STANDARD GRID SOCKET

Mounting Variations

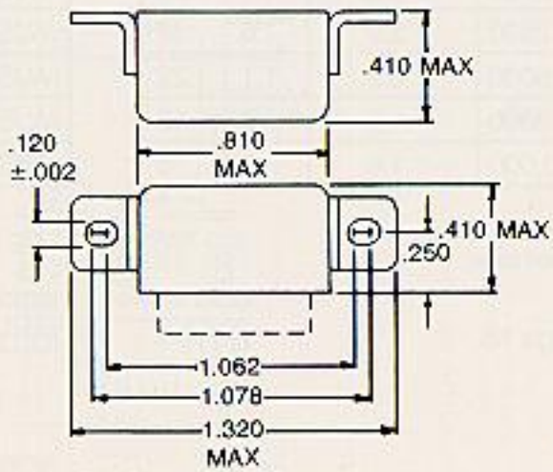


A. No bracket.



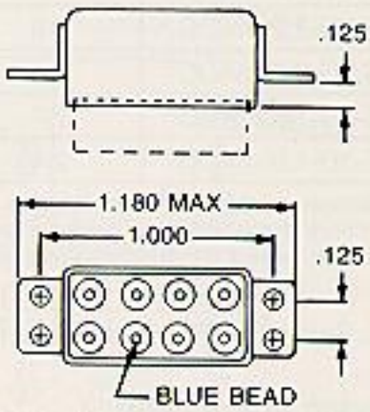
MOUNTING—.120 DIA HOLES (2)

B. Single hole—elongated for ERS or S.
O. Single hole (as shown) for S only.



Bracket rotated 90°

C. Single hole—elongated (as shown) for ERS or S.
U. Single hole for S only.



MOUNTING—.096 DIA HOLES (4)

H. Two hole for ERS or S.

Additional variations available upon request.