

HDS8 2PDT CRYSTAL CAN RELAY

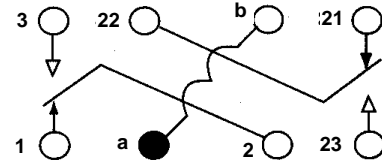


TYPE HDS8

Key Features

- Hermetically Sealed
- 3A or 5A option
- High efficiency, high torque motor unit provides greater contact forces for reliable switching.

Wiring Schematic



Specification

General

Contact Arrangement
Weight
Mating Bases

2 Pole changeover (2PDT) break before make.
15.5 gm (mounting style 01)
Solder Contacts – Order Part No. 4223-1
Crimp Contacts – Order Part No. 420204

Performance

Contact Rating/Life

3A Contacts

3A resistive, 10^5 operations at 28 VDC
2A resistive, 10^5 operations at 115 VRMS, 400 Hz
1A inductive, 10^5 operations at 28 VDC

5A Contacts

5A resistive, 10^5 operations at 28 VDC
3A resistive, 10^5 operations at 115 VRMS, 400 Hz
2A inductive, 10^5 operations at 28 VDC

Operate Time

5 ms max

Release Time

5 ms max

Bounce Time

3 ms max

All measurements at 25°C and nominal voltage

Environmental

Temperature Range

-65°C to +125°C

Shock

981 m/s² (100g) for 11 ms

Vibration

60 to 3000 Hz at 196 m/s² (20g) acceleration
10 to 60 Hz at 1.5 mm amplitude

Ordering Information

See sheet 4

Data Sheet No
DSHDS8- 3922

SHEET 1 OF 4

Design authority and manufacture by Barnbrook Systems Limited
Barnbrook Systems reserves the right to alter specifications and design without notice

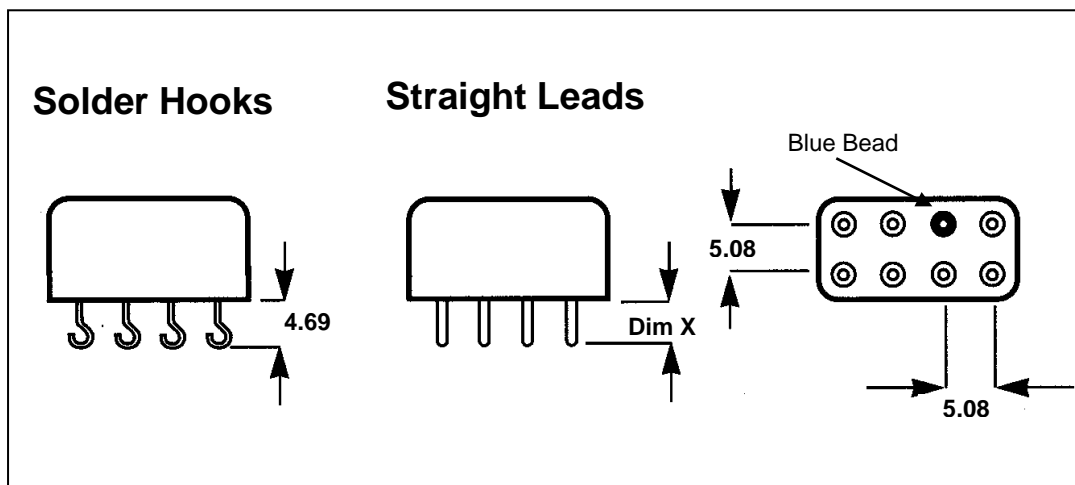
Electrical

Contact Resistance		
3A Contacts	50 mΩ initial	
	100 mΩ after rated life	
5A Contacts	30 mΩ initial	
	50 mΩ after rated life	
Insulation Resistance	Not less than 500 MΩ at 500 V	
Dielectric Strength	500 VRMS, 50 Hz at sea level between open contacts	
	1000 VRMS, 50 Hz at sea level between all other points	
	350 VRMS, 50 Hz, at 20mbar (87,000 ft) between all points	
Capacitance	Between open contacts	0.2 pF
	Between normally open contacts and case	2.0 pF
	Between normally closed contacts and case	3.0 pF
	Between contact sets	0.1 pF
	Between coil and case	16.0 pF
Coil Dissipation	Minimum operate power, 300 milliwatts	
	Power dissipation at nominal voltage, 1 watt	
	Max power dissipation, 1.5 watts at 25°C and 1 watt +125°C	

TERMINATION VARIANTS

HDS8 Ref	Type	Dim. X in mm.
A	Straight	7.92
B	Straight	12.70
C	Straight	25.40
H	Hooks	-
L	Straight	76.20
S	Straight	5.08

Termination type S suitable for use with relay sockets 4223-1 and 420204

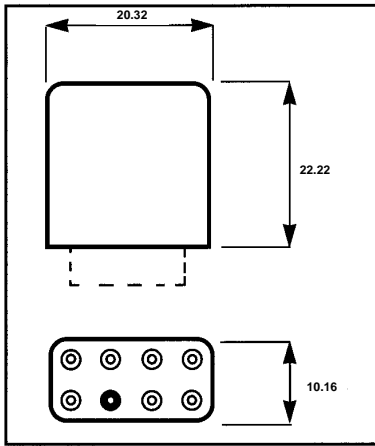


Data Sheet No
DSHDS8- 3922

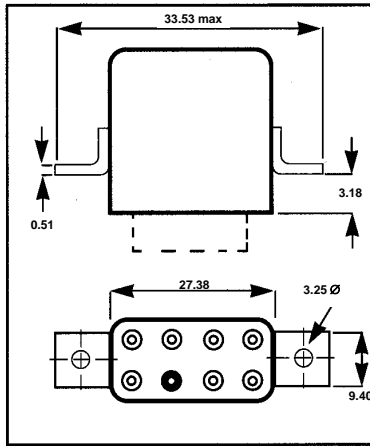
SHEET 2 OF 4

MOUNTING VARIANTS

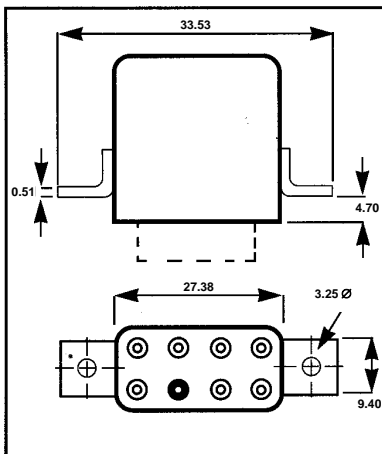
Style 01



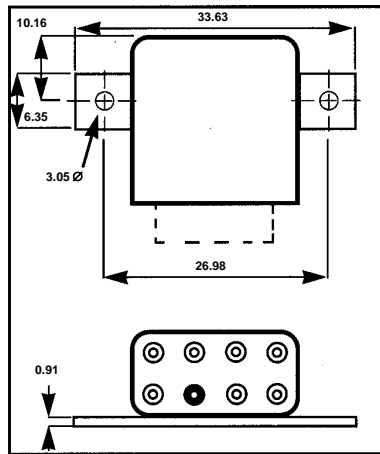
Style 03



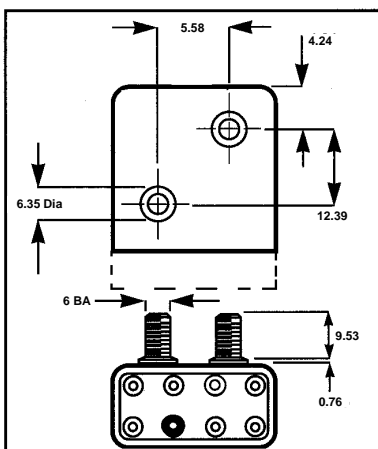
Style 06



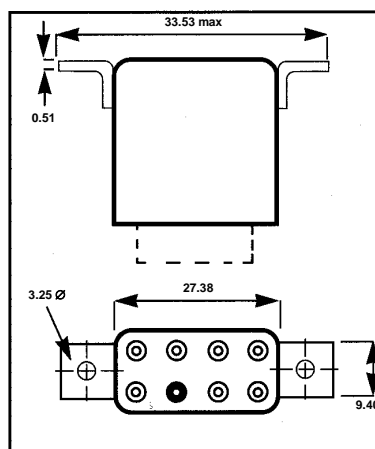
Style 07



Style 13



Style 19



All dimensions are in millimetres

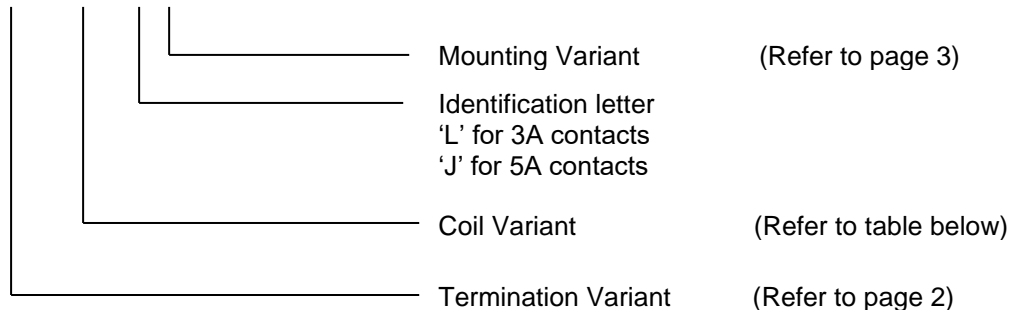
● Blue Bead

Data Sheet No
DSHDS8- 3922

SHEET 3 OF 4

ORDERING INFORMATION

HDS8S - F2 - L01



COIL VARIANTS AND OPERATING CHARACTERISTICS

3 Amp Contacts				
Coil	Nominal Operating Voltage VDC	Coil Resistance Ohms +/- 10% at 25°C	Must Pull In Voltage VDC at 25°C	Must Drop Out VDC at 25°C
C2	6.0	35	3.2	0.22
E2	13.0	200	6.8	0.49
M2	18.0	340	10.0	0.70
F2	26.5	675	13.5	1.00
J2	32.0	975	16.8	1.30
G2	48.0	2450	25.5	2.00
5 Amp Contacts				
C3	0.60	30	3.2	0.22
E3	12.0	120	6.8	0.45
F3	26.5	600	13.5	1.00
J3	32.0	850	16.4	1.20
G3	48.0	1900	24.5	1.80

All values measured at 25°C

Data Sheet No
DSHDS8- 3922

SHEET 4 OF 4