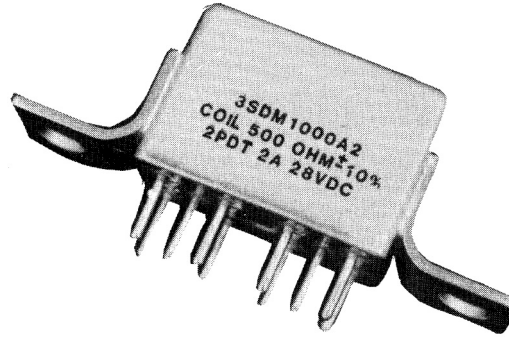


Double Pole, Magnetic Latching, 2 Amps and Less (Continued)

**Magnetic Latching,
Grid Space, Relay
Type 3SDM (2PDT)**

Product Facts

- Suitable for pulse operation
- No hang up feature
- MIL-R-39016 type
- Special contact and coil wiring available



This magnetic latching relay maintains the high reliability attributes of the aerospace proven CII 3SAM relay family. By reducing the size of the coil and maintaining the contact system of the 3SAM, we can now offer a smaller 2 amp rated magnetic latching relay. The pulse operation can provide multiple hundred thousand operations in power saving circuits. The on or off

circuits are maintained using no power until there is a need to switch the contacts. Suitable for matrix switches or relay trees, these versatile relays have contact systems capable of reliability switching high power or very low level signals in the same package. The relay's unique circuit prevents it from ever hanging up in an off-center or neutral position.

Electrical Characteristics

Contact Ratings —
DC resistive — 2 amps at 28 volts
Low-level — 50 μ A at 50 mV DC or peak AC

Contact Resistance —
0.050 ohms initial;
0.100 ohms after life test (High level)
0.150 ohms after life test (Low level)

Life —
100,000 operations at rated load;
1,000,000 operations at low-level

Operating Characteristics

Operate Time — 4 ms

Reset Time — 4 ms

Contact Bounce — 2 ms

Dielectric Strength —
1,000 volts at sea level;
500 volts across contact gap and
500 volts coil to case

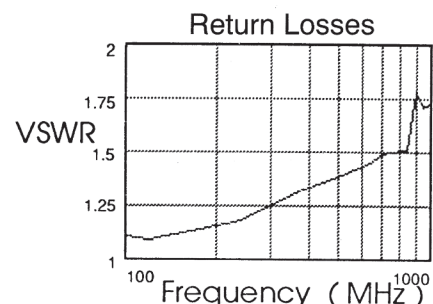
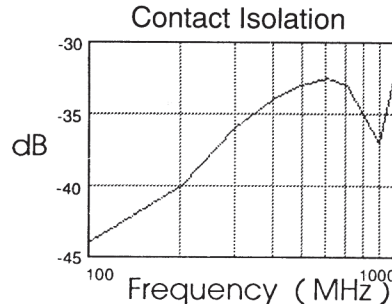
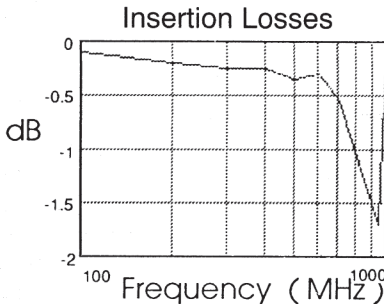
Insulation Resistance —
1,000 megohms min.

Environmental Characteristics

Vibration —
Sine — 30G; 55 to 3000 Hz
Random — 0.4 G²/Hz; 100 to 1,000 Hz

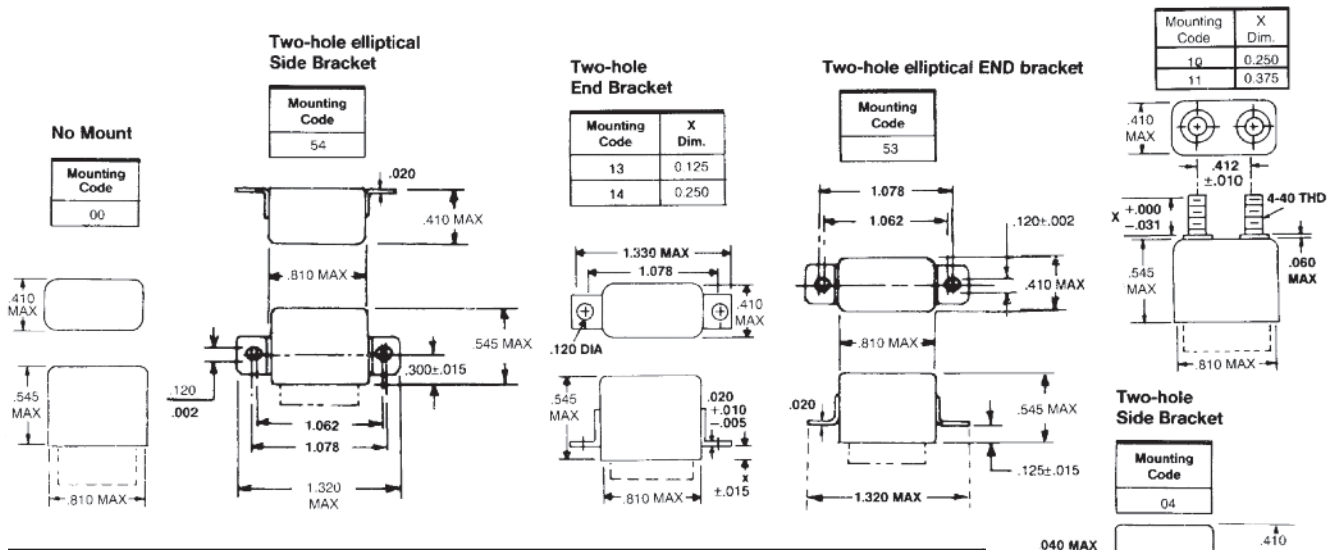
Shock — 150 G at 11 ms, half-sine wave

Temperature — -65°C to +125°C



Double Pole, Magnetic Latching, 2 Amps and Less (Continued)

Mounting Forms (3SDM)



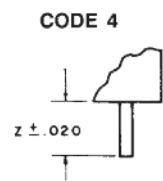
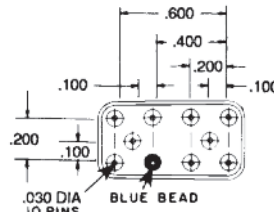
Coil Resistance (All Values are DC): Voltage Calibrated - Code 5

Coil Resistance Code	Coil Voltage Rated	Coil Voltage Maximum	Coil Res. Ohms @ 20°C	Max. Set-Reset VDC @ 20°C	Max. Set-Reset VDC @ 125°C
C	6	7	31 +/- 10%	3.0	5.3
F	12	14	124 +/- 10%	6.0	10.5
H	24	28	500 +/- 10%	12.0	21.0

Values are factory test and inspection values. User should allow for meter variations.

Header:

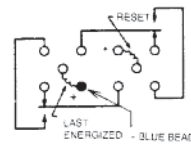
Type	Z Dimensions	Header Code
Straight Pin (socket or PCB Type)	0.19 +/- .020	4
Solder Hook	0.16 +/- .020	2



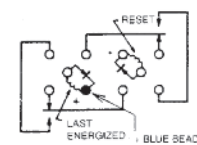
Sensitivity and Modification: 290 mW Sensitivity

Sensitivity Code	Modification (see connection diagrams at right)
1	No Diode
5	Single Diode

(Terminal View) (+ on blue bead closes as shown)



SCHEMATIC DIAGRAM TERMINAL VIEW CODE 1



SCHEMATIC DIAGRAM TERMINAL VIEW WITH DIODE CODE 5

Ordering Instructions

Type 3SDM relays can be ordered by specifying the correct catalog number. This number is derived by choosing the proper CODE for each of the six relay characteristics in the order in which the codes are listed in the example. The letter R following the sensitivity relay code indicates relay received 5,000 operations miss-test.

Example: The relay selected is a 2PDT magnetic-latching relay, voltage calibrated, 2-hole end bracket mount, solder hook header, 500 ohm coil, and 290 mW sensitivity. **3SDM5132H1**

Relay Characteristic Catalog Number

