

Application Notes:

101
102
103E
007

- Balanced armature, nonlatching hermetically sealed relay

- Contact arrangement **3 PST configuration with 1PDT, 2 Amp auxiliary contacts**

- Coil Supply **Direct or alternating current**

- Qualified or in accordance with **MIL-PRF-6106**

PRINCIPLE TECHNICAL CHARACTERISTICS

- Contacts rated at **28 Vdc; 115 Vac, 60 Hz and 400 Hz, 1 Ø; 115/200 Vac, 400 Hz, 3Ø and 60 Hz**
- Weight **0.44 lbs. max**
- Dimensions **1.53 x 1.53 x 2.06 in. max**
- **Balanced-force design, all welded construction**
- **Hermetically sealed, corrosion protected metal can**
- **No make before break**
- **Special models available upon request**

CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type [1]	Load current in Amps			
	28 VDC	115 Vac 400Hz	115/200 Vac 400 Hz, 3Ø	120/208 Vac 50/60 Hz 1 & 3 Ø
Resistive [1]	25	25	25	25
Inductive [2]	15	25	25	25
Motor	20	20	20	12
Lamp	10	10	10	10
Overload	80	120	120	-
Rupture	100	150	150	-
Contact rating, Auxiliary contacts At 28 Vdc or 115 Vac 400 Hz		Resistive 2 Amp	Inductive 1 Amp	Lamp 0.5 Amp

Dimensions in inches
Tolerances, unless otherwise specified
XXX ± .010
XX ± .03

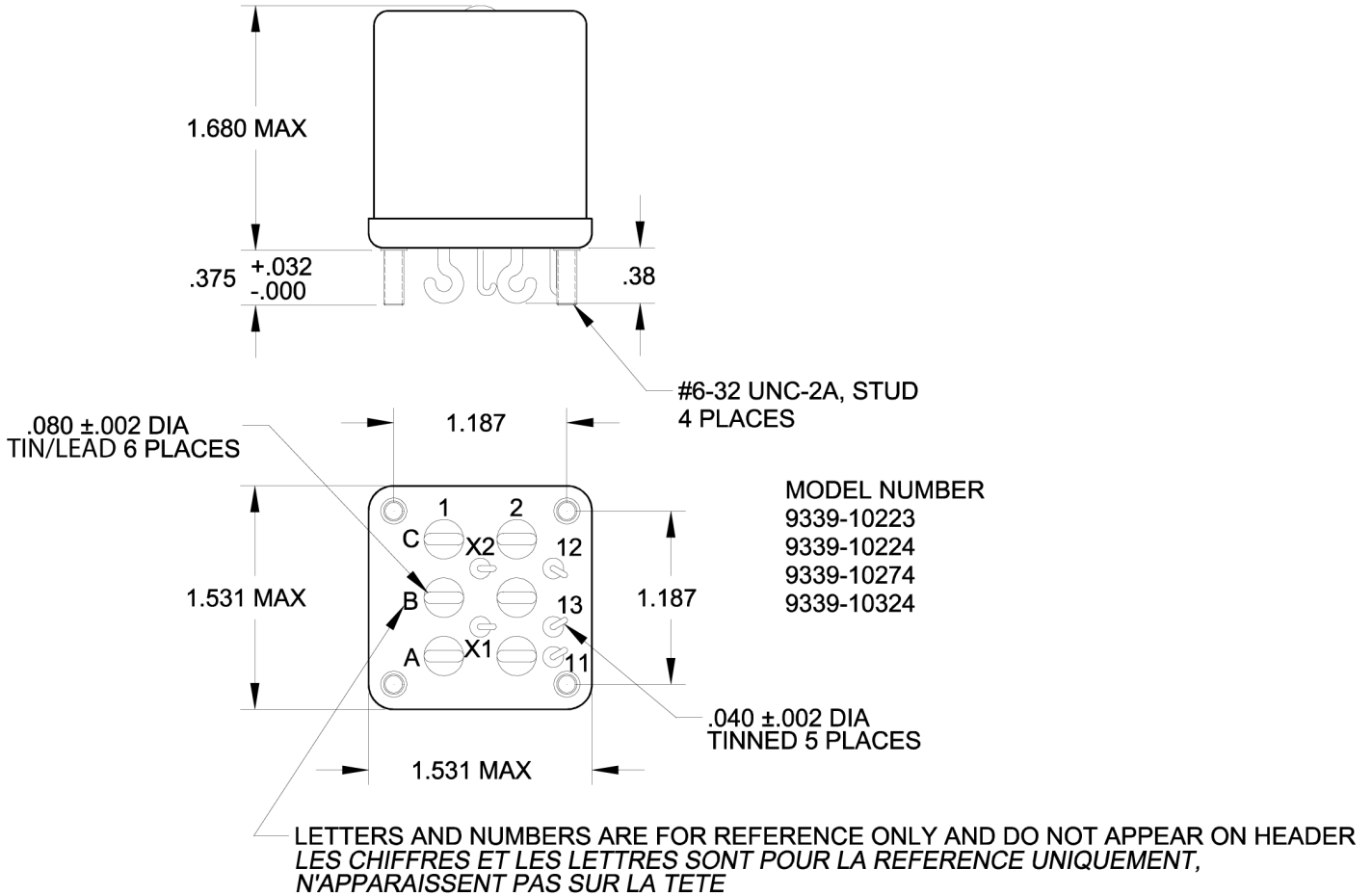
COIL CHARACTERISTICS (Vdc)

COIL DATA	Vdc	115 Vac 400 Hz [3]	115 Vac	Suppressed Vdc [7]
Nominal operating voltage	28	115	115	28
Maximum operating voltage	29	122	122	29
Maximum Pick-up voltage @ +125° C	18	95	95	18
Drop-out voltage, max	7	40	40	7.0
Coil resistance $\Omega \pm 10\%$ at +25° C	160	-	-	160
Coil current max. mA at +25° C	-	55	60	-

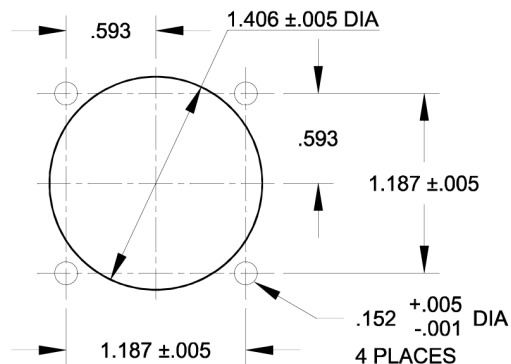
GENERAL CHARACTERISTICS

Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load	50,000
Minimum operating cycles (life) at 25% rated load	200,000
Dielectric strength at sea level all points	
All circuits to ground and circuit to circuit	1,500 Vrms / 50 Hz
Coil to ground	1,250 Vrms
Auxiliary contact gap	1,000 Vrms
Dielectric strength at altitude 80,000 ft	500 Vrms [5] 250 Vrms Aux. contacts
Insulation resistance	
Initial (500 Vdc)	100 M Ω min
After environmental tests (500 Vdc)	50 M Ω min
Sinusoidal vibration [6]	0.08 DA (5 to 10 Hz) 0.06 DA (10 to 55 Hz) 10 G (55 to 1500 Hz)
Acceleration	10 G
Shock: No contact opening in excess of 2 ms	50 G for 11 ms
Maximum contact opening time under vibration	10 μ s
Operate time at nominal voltage & 25°C	
DC	20 ms max
AC	25 ms max
Release time at nominal voltage & 25°C	
DC [9]	10 ms max
AC	50 ms max
Contact bounce at nominal voltage	
Power contacts	2 ms msx
Auxiliary contacts	4 ms max

MOUNTING STYLE



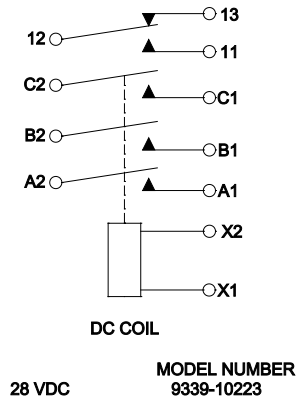
MOUNTING DATA



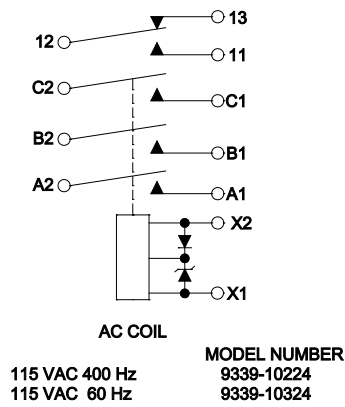
SUGGESTED MOUNTING HOLE LAYOUT FOR MOUNTING STUD
SUGGESTION DE LA DISPOSITION DES TROUS DE MONTAGE
POUR MONTAGE AVEC GOUJON

SCHEMATIC DIAGRAM

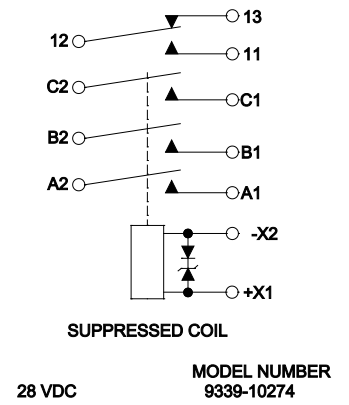
SCHEMATIC DIAGRAM 1



SCHEMATIC DIAGRAM 2



SCHEMATIC DIAGRAM 3



NOTES

1. Standard Intermediate current test applicable.
2. DC inductive load 10,000 cycles min., AC inductive load 20,000 cycles.
3. May be used on 115 Vac, 60 Hz if max. ambient temperature is limited to +85° C.
4. Military approvals - M6106/41.
5. May be at sea level values if suitably insulated after installation and wiring.
6. Special units available - Consult factory.
7. Suppressed coils have back EMF suppression to 42 Volts.
8. Applicable military specification: MIL-PRF-6106.
9. Release time is 0.015 sec max. @ 25° C with nominal 28 Vdc coil voltage and coil suppression.

For any inquiries, please contact your local sales representative: leachcorp.com