

HALF SIZE CRYSTAL CAN RELAY 2 AMPERE SENSITIVE

Series KA

Product Description

Innovation and versatility of design has allowed Hi-G to achieve this improved sensitivity of our basic military qualified product. The product reflects an improved magnetic circuit powering our standard contact structure to levels of 2 amperes. The internal structures reflect and conform to the latest military specifications and are supported by a continuing qualification program. Product performance, reliability and sensitivity are reflected in this unique device and provide the design engineer with a tool for improved circuit design.

The following construction features ensure the highest reliability in extreme environments:

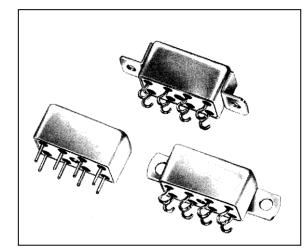
- All welded relay construction
- Cleaning and sealing techniques ensures maximum internal cleanliness
- Low level to 2 amperes switching
- 2 form C, DPDT contacts, special metal alloy with gold plating
- Frame, armature designs and force / mass ratio provides exceptional immunity to shock and vibration.

Series Type

- **2KA** 2 form C, DPDT

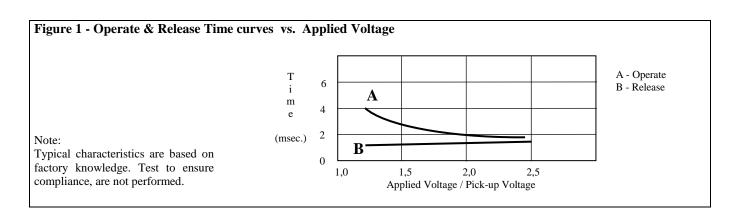
Environmental and Physical Specifications

| Temperature (Ambient) | - 65°C to + 125°C |
|------------------------|----------------------------|
| Shock | 100 g, 6 ms. |
| Vibration (sinusoidal) | 20 g, 10 to 2000 Hz |
| Acceleration | 30 g |
| Sealing | All welded, Hermetic |
| Weight | 0,40 oz. (11,3 grams) max. |



Electrical Characteristics (over the Temperature range. Unless otherwise noted)

| Coil Data | See Typical Characteristics chart | | | | | |
|----------------------------------|--|--------------------------|-------------|--|--|--|
| Contact Rating | Type Load | Contact Load | Cycles min. | | | |
| | Low Level | 10 mA / 30 mV | 1.000.000 | | | |
| (Note: All ratings with grounded | Resistive | 2 A / 28 Vdc | 100.000 | | | |
| case) | | 1 A / 115Vac, 400 Hz | 100.000 | | | |
| | | 0,3 A / 115 Vac, 60 Hz | 100.000 | | | |
| | Overload | 4 A / 28 Vdc | 100 | | | |
| | Inductive | 0,75 A / 28 Vdc (200 mH) | 100.000 | | | |
| Contact Resistance | 0.05Ω max. initial | | | | | |
| Operate Time | 5,0 ms. max. at 25°C | | | | | |
| Release Time | 3,0 ms. max. at 25°C | | | | | |
| Contact Bounce | 3,0 ms. max. at 25°C | | | | | |
| Dielectric Strength | 1.000 Vrms min., 60 Hz, all points, 500 Vrms min. between open contacts and coil to case, at sea level | | | | | |
| Insulation Resistance | $1.000 \text{ M}\Omega$ min. all points at 500 Vdc | | | | | |
| Intercontact Capacitance | 2,5 pF between contacts | | | | | |
| Sensitivity | 100 mW at pick-up, 280 mW typical at nominal rated coil voltage, at 25 °C | | | | | |



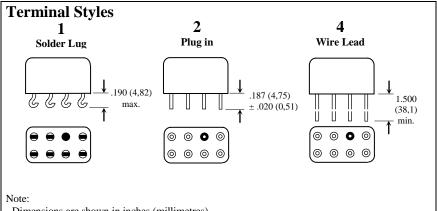


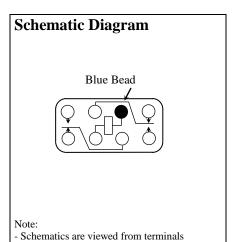
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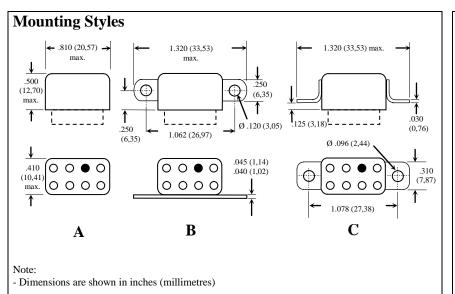
Typical Characteristics

| Voltage Code | Coil Voltage | | Coil Resistance | Pick-up Vdc | Drop-out Vdc |
|-----------------|--------------|------|-----------------|----------------|-----------------|
| | Nominal | Max. | ± 10% at 25°C | Max. at 25°C | Min. at 25°C |
| 105 | 5,0 | 6,0 | 90 | 3,7 | 0,25 |
| 106 | 6,0 | 7,2 | 130 | 3,6 | 0,35 |
| 112 | 12,0 | 14,0 | 520 | 7,2 | 0,7 |
| 118 | 18,0 | 21,0 | 1100 | 11,0 | 1,0 |
| 124 | 24,0 | 29,0 | 2070 | 17,5 | 1,4 |
| 126 | 26,5 | 32,0 | 2070 | 14,4 | 1,4 |
| 136 | 36,0 | 43,0 | 4550 | 26,0 | 2,2 |
| 148 | 48,0 | 57,6 | 8300 | 28,8 | 2,8 |





- Dimensions are shown in inches (millimetres)
- Terminal spacing is .200 (5,08). Terminal diameter is .030 (0,76) + .003 (0,08) .002 (0,05)



Insulating Pad

Relays can be supplied with a insulating pad epoxied to the relay header, to prevent the possible shorting of printed circuit board land lines and to facilitate circuit board cleaning. To order relay with pad add. "P" to Part Number. Example: 2KA-2A-126 P

