PICKERING SERIES 106

Single-in-Line reed relays

for stacking on 0.2 x 0.8 inches pitch

The Series 106 is a range of Single-In-Line reed relays intended for stacking on 0.2 inches pitch. Their small size, superb contact resistance stability and ultra high insulation resistance, make these relays an ideal choice for Automatic Test Equipment. They have an internal mu-metal screen to eliminate problems that would otherwise be experienced due to magnetic interaction. While the screening is not quite as efficient as the complete mu-metal can of the Series 107,108 or 109, it is more than adequate for most applications (see explanation below).

If even greater packing density is required, smaller devices are available in other Pickering SIL ranges.

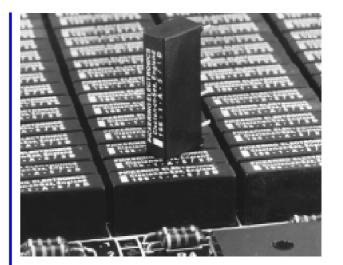
- Internal mu-metal screen.
- Insulation resistance greater than 10¹² ohms for Form A devices.
- Dry switches available in both1 Form A and 1 Form C configurations.
- 5 and 12 Volt coils are standard, with or without internal diode.
- 5 Volt coils are 500 ohms and may be driven directly from TTL logic.
- 100% tested for dynamic contact resistance.

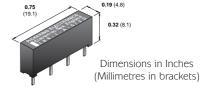
pickering

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Switch Ratings

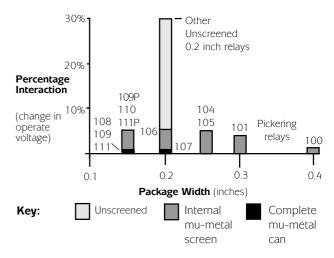
- 1 Form A (energize to make), 10 watts at 200v
- 1 Form C (change-over), 3 watts at 200v

Magnetic Interaction - An explanation

Magnetic interaction between relays is normally measured as a percentage increase in the voltage required to operate a relay, due to the extraneous fields from adjacent relay coils.

An unscreened SIL relay of this size, has an interaction figure of around 30 percent and it may prove impossible to operate such a relay at its nominal coil voltage in high packing density applications.

A Pickering Series 106 has an interaction figure of approximately 5 percent.



Dry Reed Series 106 switch ratings

The contact ratings for each switch type are shown below.

| Sw. No | Switch form | Power rating | Max. switch current | Max. carry current | Max. switching volts | Special features |
|-----------|----------------|--------------|---------------------------|--------------------------|----------------------------|---------------------|
| 1 | A | 10 Watts | 0.50 Amp. | 1.2 Amp. | 200 | General purpose |
| 2 | A | 10 Watts | 0.50 Amp. | 1.2 Amp. | 200 | Low level |
| 3 | C | 3 Watts | 0.25 Amp. | 1.2 Amp. | 200 | Change over |

Switch no. 2 is a sputtered ruthenium device and is particularly good for switching low currents and/or voltages. It is the ideal switch for Automatic Test Equipment where cold switching techniques are often used. Where higher power levels are involved, switch no. 1 is a more suitable choice.

Relay data and type numbers.

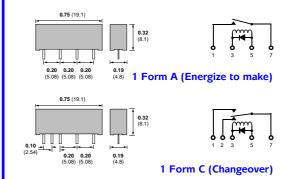
| Device type | Type number | Coil volts | Coil resistance (ohms) | Max. contact resistance (initial) |
|------------------------------|---------------|---------------|------------------------------|---|
| 1 Form A (energize to make) | 106-1-A-5/1D | 5 | 500 | 0.15 Ohms |
| General Purpose Switch No. 1 | 106-1-A-12/1D | 12 | 1000 | 0.15 Ohms |
| 1 Form A (energize to make) | 106-1-A-5/2D | 5 | 500 | 0.12 Ohms |
| Low Level Switch No. 2 | 106-1-A-12/2D | 12 | 1000 | 0.12 Ohms |
| 1 Form C (change-over) | 106-1-C-5/3D | 5 | 500 | 0.20 Ohms |
| Switch No. 3 | 106-1-C-12/3D | 12 | 1000 | 0.20 Ohms |

When an internal diode is required, the suffix D is added to the part number as shown in the table. If a diode is not required, the D suffix should be omitted.

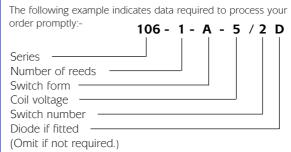
Please ask us for a sample

Pin configuration and dimensional data

Dimensions in Inches (Millimetres in brackets)



Order Code



Help!!!

If you need any technical advice or help in any way, please telephone our Technical Sales Department. There is a limit to how much data we can put on a sales leaflet and we will always be pleased to discuss Pickering reed relays with you.

