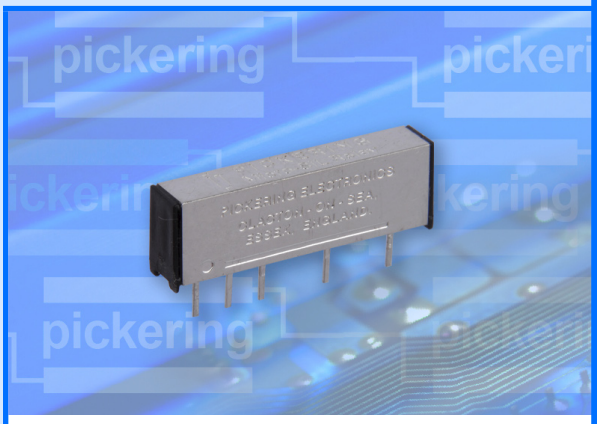
Micro-SIL Reed Relays

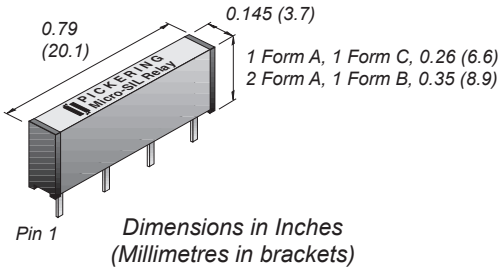
for stacking on 0.15 x 0.8 inches pitch

New 3 Volt Version

FEATURES

- *SoftCenter*™ construction (see opposite)
- Highest quality instrumentation grade switches
- Encapsulated in a mu-metal can
- Insulation resistance greater than 10^{12} ohms for Form A devices
- Dry switches available in 1 Form A, 2 Form A and 1 Form C configurations. 2 Form A types require the same board area as 1 Form A
- 3, 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





Dimensions in Inches
(Millimetres in brackets)

The Pickering Series 108 is a range of magnetically screened single-in-line reed relays that stack on 0.15 inches (3.8mm) pitch, resulting in a 25 percent saving in board space over 0.2 inch (5.08mm) wide relays. This means that it is possible to pack 33 percent more relays into the same board area.

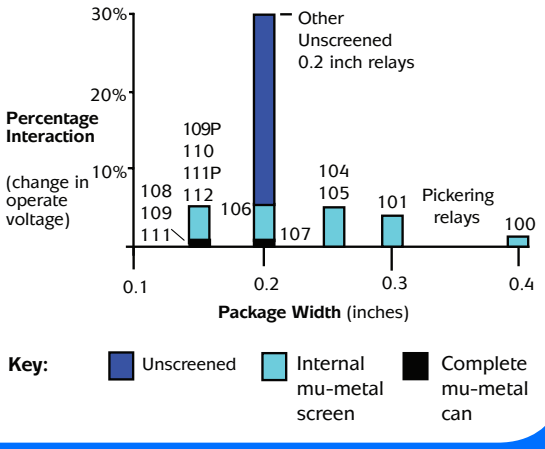
Their small size, superb contact resistance stability and ultra high insulation resistance, greater than 10^{12} ohms for Form A devices, make these relays a popular choice for high quality instrumentation.

The device is encapsulated in a mu-metal can using a very high resistivity resin. Mu-metal is used rather than steel because of both its very high permeability and its low magnetic remanance. This construction totally eliminates the risk of magnetic interaction problems. Magnetic interaction is usually measured as a percentage increase in the voltage required to operate a relay when two additional relays, stacked one each side, are themselves operated. An unscreened device mounted on this pitch would have an interaction figure of around 40 percent, it would therefore be totally unsuitable for applications where relays are to be packed densely. Pickering Series 108 have a typical interaction figure of only 1 percent.

Dry switches are available in 1 or 2 Form A (energize to make) and 1 Form C (change-over) configurations. 3, 5 and 12 Volt coils are available, 5 Volt coils have a resistance of 500 Ohms and may therefore be driven directly from TTL logic.

Switch Ratings

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



www.pickeringrelay.com

Series 108 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	0.5 Amp.	1.2 Amp.	200	General purpose
2	A	10 Watts	0.5 Amp.	1.2 Amp.	200	Low level
3	C	3 Watts	0.25 Amp.	1.2 Amp.	200	Change over

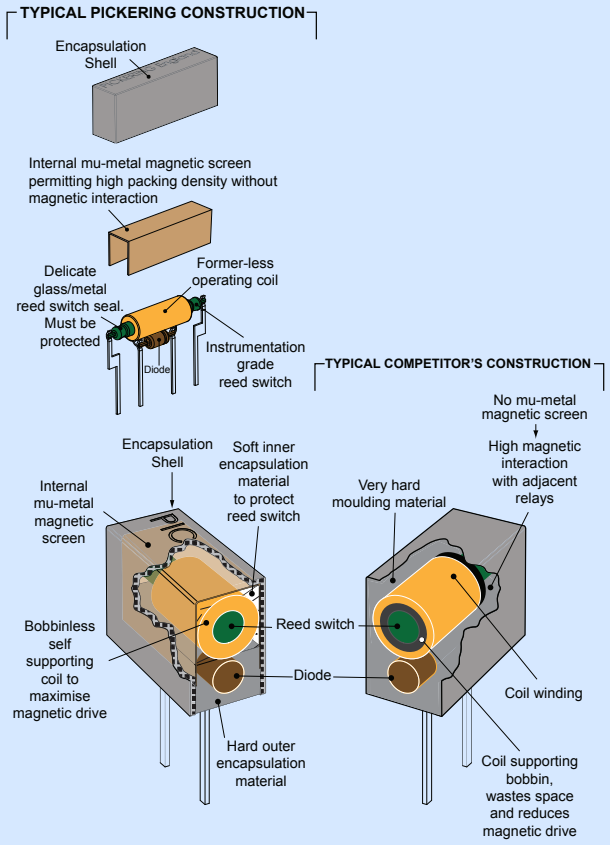
Switch no.2 is particularly good for switching low currents and/or voltages. It is the ideal switch for Automatic Test Equipment where cold switching techniques are often used. Where higher power levels are involved, switch no.1 is a more suitable choice.

Coil data and type numbers

Device type	Type Number	Coil voltage	Coil resistance	Max. contact resistance (initial)
1 Form A (energize to make) General Purpose Switch No. 1	108-1-A-5/1D 108-1-A-12/1D	5 12	500 1000	0.15 Ohms 0.15 Ohms
1 Form A (energize to make) Low Level Switch No. 2	108-1-A-3/2D 108-1-A-5/2D 108-1-A-12/2D	3 5 12	330 500 1000	0.12 Ohms 0.12 Ohms 0.12 Ohms
1 Form C (change-over) Switch No. 3	108-1-C-5/3D 108-1-C-12/3D	5 12	500 1000	0.2 Ohms 0.2 Ohms
2 Form A (energize to make) General Purpose Switch No. 1	108-2-A-5/1D 108-2-A-12/1D	5 12	375 1000	0.17 Ohms 0.17 Ohms
2 Form A (energize to make) Low Level Switch No. 2	108-2-A-5/2D 108-2-A-12/2D	5 12	375 1000	0.15 Ohms 0.15 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.

Pickering SoftCenter™ Construction



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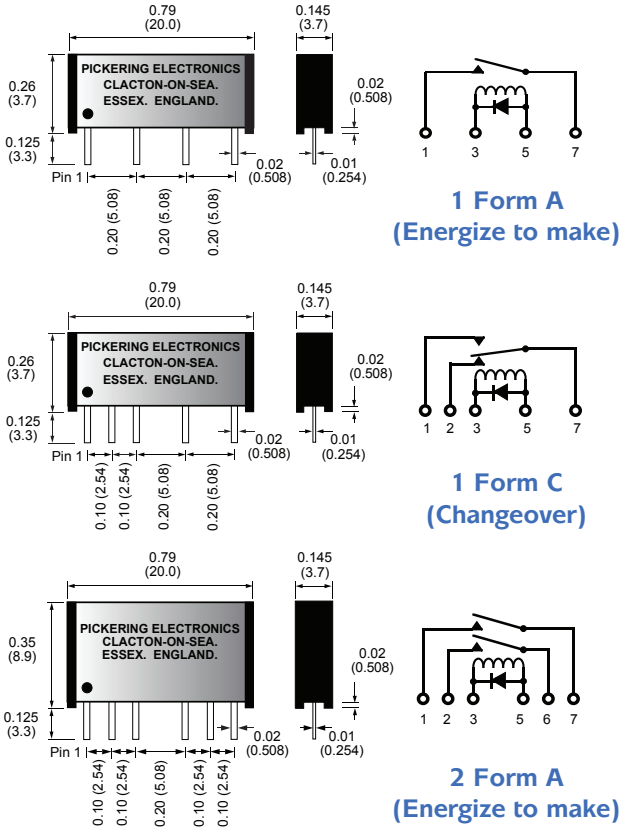
ISO9001
Manufacture of Reed Relays
FM 29036

Pin configuration and dimensional data

Dimensions in Inches (Millimetres in brackets).



Order Code

The following example indicates data required to process your order promptly:

108 - 1 - A - 5 / 2 D

- *Series*
- *Number of reeds*
- *Switch form*
- *Coil voltage*
- *Switch number (See table adjacent)*
- *Diode if fitted (Omit if not required)*

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.

Please ask us for a FREE evaluation sample