

SIP-1A05 (reed relay) – the floor-short / kill switch element

PAN CHANG · SIP-4 (4 leads) · 5 V coil reed · ~\$0.4

WHAT IT IS

A reed relay: a tiny magnetic switch (two metal reeds in a glass tube) closed by a coil. ~150 mΩ closed, truly open when off, and the contact is galvanically isolated from the coil. A real mechanical contact, not a transistor – so it can carry a glitch signal cleanly.

KEY SPECS (what matters to us)

SPST normally-open · 5 V coil ~10 mA · ~150 mΩ closed
Schematic pins 1/7 = coil, 3/5 = the switch contacts

SIGNALS / PINS WE USE

Coil: pin1 (drive) / pin7 (V_LED 5 V) · Contacts: pin3 / pin5

ELECTRICAL · GOTCHAS

Coil is inductive → needs a flyback diode. 5 V coil → don't feed it 12 V. Non-polarized contact = great for a bidirectional signal path.

WHY IT'S IN OUR SYSTEM

Two jobs: (1) D-01 "floor short" – snap a CR channel to a TRUE 0 Ω that a vactrol can never reach (the "launch"); (2) Kill Grid – make/break 8 signal paths. ~150 mΩ vs an 18 Ω vactrol floor = 120:1 = a dead short. A real contact = clean signal, no semiconductor leakage.