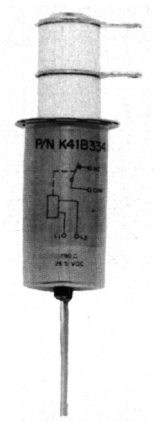
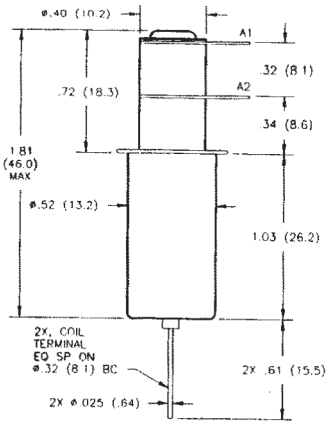
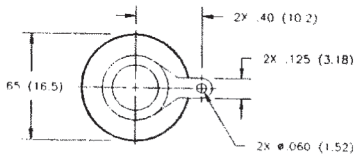
K41 Series Make & Break Load Switching — 5.0 kV Relays

K41A, K41B Product Facts

- High current carry rating
- Vacuum dielectric for power switching low current loads
- Glazed ceramics for low current leakage
- Compact, space-saving design
- Meets requirements of MIL-R-83725
- QPL versions available, M83725/21 & M83725/22

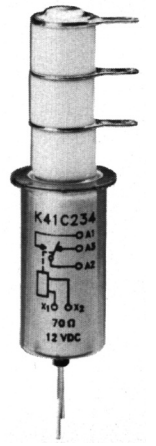


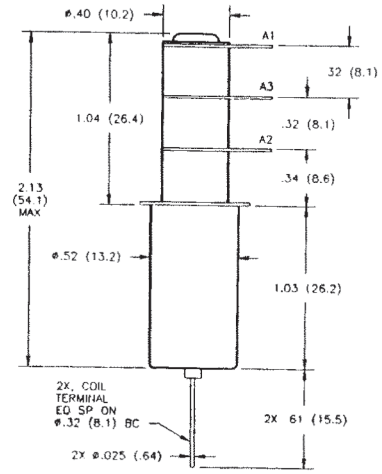


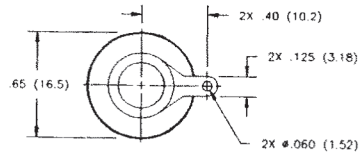


K41C Product Facts

- Single pole, double throw version
- Vacuum dielectric for power switching low current loads
- RF ratings to 32 MHz
- Long life: 2 million cycles
- Meets requirements of MIL-R-83725
- QPL version available, M83725/23







Product Specifications for K41A, K41B and K41C

Contact Arrangement —
K41A — SPST-NO
K41B — SPST-NC
K41C — SPDT

Contact Form —
K41A — A
K41B — B
K41C — C

Test Voltage, DC or 60 Hz (Peak) — 6 kV

Rated Operating Voltage (Peak) —
DC or 60 Hz — 5 kV
2.5 MHz — 4.5 kV
16 MHz — 3.5 kV
32 MHz — 2.8 kV

Continuous Carry Current, Max. —
DC or 60 Hz — 30 A
2.5 MHz — 24 A
16 MHz — 16 A
32 MHz — 12 A
Coil Hi-Pot (Vrms, 60 Hz) — 500 A

For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

Contact Capacitance —
Between Open Contacts — 1.2 pF
Open Contacts to Ground — 1.2 pF

Contact Resistance, Max. — 0.02 ohm

Operate Time, Max. — 10 ms

Release Time, Max. — 10 ms

Shock, 11ms, 1/2 Sine (Peak) — 50 g

Vibration —
Peak — 10 g (55 to 2000 Hz)

Operating Ambient Temperature Range — -55°C to +125°C

Mechanical Life — 2 million cycles

Weight, Nominal —
28.35 g (1.0 oz.)

***See page 7-87 for turret terminal dimensions and mounting methods.**

Coil Data

Nominal Volts DC	12 Vdc	26.5 Vdc	115 Vdc
Pickup, Max.	8 Vdc	16 Vdc	80 Vdc
Dropout	.5-5 Vdc	1-10 Vdc	5-50 Vdc
Coil Resistance (±10%)	70 Ω	290 Ω	4700 Ω

Ratings listed are for 25°C, sea level conditions

Ordering Information

Sample Part Number ▶ **K41 A 3 3 4**

Series:

Contact Form:
A = SPST-NO B = SPST-NC C = SPDT

Coil Voltage:
2 = 12 Vdc, Bus Wire
3 = 26.5 Vdc, Bus Wire
5 = 115 Vdc, Bus Wire
7 = 12 Vdc, Turret Terminal*
8 = 26.5 Vdc, Turret Terminal*
9 = 115 Vdc, Turret Terminal*

High Voltage Connections:
3 = Solder Connection

Mounting:
2 = Flanged 4 = Standard

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

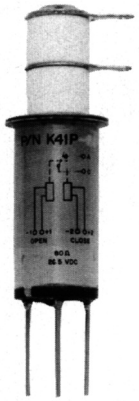
For additional support numbers please visit www.te.com

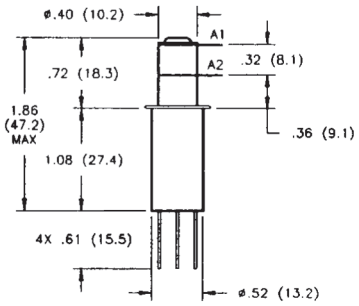
K41 Series Make & Break Load Switching — 5.0 kV Relays

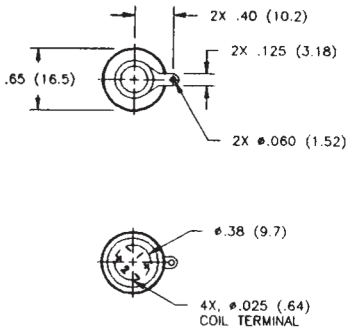
K41P

Product Facts

- **Fast, 6 millisecond operate time**
- **Vacuum dielectric for power switching low current loads**
- **Latching actuator for low power consumption**
- **Ideal for frequency agile communication systems**
- **Meets requirements of MIL-R-83725**
- **QPL version available, M83725/24**



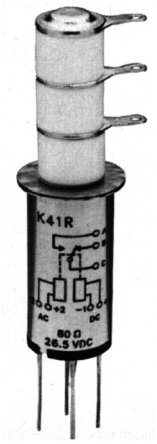


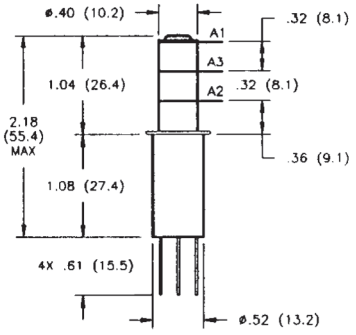


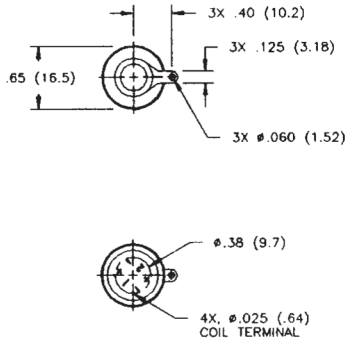
K41R

Product Facts

- **Latching actuator for low power consumption**
- **Vacuum dielectric for power switching low current loads**
- **Meets requirements of MIL-R-83725**
- **Latching version of K41C**







Product Specifications for K41P and K41R

Contact Arrangement —
K41P — SPST-Latching
K41R — SPDT-Latching

Contact Form —
K41P — P
K41R — R

Test Voltage, DC or 60 Hz (Peak) —
6 kV

Rated Operating Voltage (Peak) —
DC or 60 Hz — 5 kV
2.5 MHz — K41P — 4.5 kV
K41R — 4.0 kV
16 MHz — K41P — 3.5 kV
K41R — 3.2 kV
32 MHz — K41P — 2.8 kV
K41R — 2.5 kV

Continuous Carry Current, Max. —
DC or 60 Hz — 30 A
2.5 MHz — K41P — 20 A
K41R — 16 A
16 MHz — K41P — 13 A
K41R — 10 A
32 MHz — K41P — 10 A
K41R — 6 A
Coil Hi-Pot (Vrms, 60 Hz) — 500 A

For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

Contact Capacitance —
Between Open Contacts —
K41P — 1.2 pF
K41R — 1.6 pF
Open Contacts to Ground —
K41P — 1.2 pF
K41R — 1.6 pF

Contact Resistance, Max. —
0.02 ohm

Operate Time, Max. — 6 ms

Release Time, Max. — N/A

Shock, 11ms, 1/2 Sine (Peak) —
K41P — 50 g
K41R — 30 g

Vibration —
Peak — 10 g (55 to 2000 Hz)

Operating Ambient Temperature Range — -55°C to +125°C

Insulation Resistance —
Initial — 10 gigaohms

Mechanical Life — 1 million cycles

Weight, Nominal —
28.35 g (1.0 oz.)

Coil Data

Volts, Nominal	26.5 Vdc
Reset & Latch, Max.	16 Vdc
Dropout	N/A
Coil Resistance (±10%)	80 Ω

Ratings listed are for 25°C, sea level conditions.

Ordering Information

Sample Part Number ▶ **K41 P 3 3 4**

Series:

Contact Form:
P = SPST-Latching R = SPDT-Latching

Coil Voltage:
3 = 26.5 Vdc, Bus Wire

High Voltage Connections:
3 = Solder Connection

Mounting:*
2 = Flanged 4 = Standard

***See page 7-87 for mounting methods.**

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

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Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

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