Reliability characteristic data for:
Reed switch

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Model number: D-A90, D-A93, D-A96
D-A90V, D-A93V, D-A96V series

B10 data

Based on the following endurance test results of the Reed switch D-A90, D-A93, D-A96, D-A90V, D-A93V, D-A96V series, and assuming a failure mode following the Weibull distribution the following B10 data has been estimated. (90% confidence level)

	B10
D-A90, A93, A96, A90V, A93V, A96V series	16.4 million cycles

NOTE:

The estimated reliability data provided is only applicable to the component in the stated operating conditions.

Use of this data for any assessment under standards or otherwise, is at the sole risk of the user.

This product is not a safety component and is not supplied to provide a safety function.

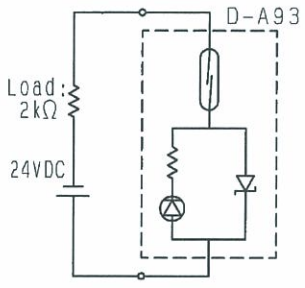
Endurance test results

For reference

- 10 Reed switch were tested up to 20 million cycles, and found to have zero failure.

Endurance test conditions

1) Test circuit



2) Load voltage: 24VDC
3) Load current: 10.8 mA
4) Contact protection circuit: None
5) Operating freq.: 8 times / sec.
6) Laboratory: Life test room
7) Ambient temp.: Normal temp. (13 to 33°C)
8) Load: 2 kΩ (5m in lead wire length)

※ D-A90, A96, A90V, A93V and A96V use the same reed switch as D-A93, so an endurance test is not performed.

Result of design assessment and validation to EN ISO 13849-1:2008 & EN ISO 13849-2:2008

This component conforms to the basic safety principles ☑ yes
This component conforms to the basic safety principles and well tried safety principles ☐ yes

IMM No.D*ZZ-TFP24

The component is not a safety component as defined by Article2(c) of the Machinery Directive 2006/42/EC

Validated products to EN ISO 13849-1:2008 & EN ISO 13849-2:2008

D-A93☐

Cable length

—	0.5m
L	3m
Z	5m

※D-A90, A96, A90V, A93V and A96V are also common.
However, D-A90Z, A96Z, A90VZ and A96VZ are special order products.