

Single Pole Double Throw (SPDT) Switchers, SKD Series

FEATURES:

- ◆ Frequency coverage: 0.5 to 110 GHz
- ◆ Reflective and absorptive
- ◆ Low insertion loss and high isolation
- ◆ Standard temperature range: -10 to +60 °C



APPLICATIONS:

- ◆ Radar systems
- ◆ Communication systems
- ◆ System integrations
- ◆ Test instrumentations

DESCRIPTION:

SKD series single pole double throw (SPDT) switches are discrete or MMIC based PIN diode switches. As catalog models, both reflective and absorptive switches are offered up to 18 GHz, and only reflective switches are offered from 18 GHz above. While the focus of the catalog models address specific operation frequencies, performances and package styles, custom designed models are available to meet customers' unique application needs.

CATALOG MODELS:

Model Number	Frequency Range (GHz)	Insertion Loss (dB)	Isolation (dB)	Switching Time (ns)	Power Handling (W)	Bias V / I (V / mA)	VSWR	Outline
SKD-0230431580-SFSF-A1	2.0 to 4.0	1.5	80	100	1.0	±5.0 / 50	1.5:1	KD-RC
SKD-0430831880-SFSF-A1	4.0 to 8.0	1.8	80	100	1.0	±5.0 / 50	1.7:1	KD-RC
SKD-0831833380-SFSF-A1	8.0 to 18.0	3.3	80	100	1.0	±5.0 / 50	2.0:1	KD-RC
SKD-0521833360-SFSF-A1	0.5 to 18.0	3.6	60	100	0.5	±5.0 / 50	2.0:1	KD-RC
SKD-0230431480-SFSF-R1	2.0 to 4.0	1.4	80	100	1.0	±5.0 / 50	1.5:1	KD-RC
SKD-0430831680-SFSF-R1	4.0 to 8.0	1.6	80	100	1.0	±5.0 / 50	1.7:1	KD-RC
SKD-0831833080-SFSF-R1	8.0 to 18.0	3.0	80	100	1.0	±5.0 / 50	2.0:1	KD-RC
SKD-0521833260-SFSF-R1	0.5 to 18.0	3.2	60	100	0.5	±5.0 / 50	2.0:1	KD-RC
SKD-1832732540-KFKF-R1	18.0 to 26.5	2.5	40	100	0.25	±5.0 / 20	1.5:1	KD-RC
SKD-2734032735-KFKF-R1	26.5 to 40.0	2.7	35	100	0.25	±5.0 / 20	1.5:1	KD-RC
SKD-1834033230-KFKF-R1	18.0 to 40.0	3.2	30	100	0.25	±5.0 / 20	1.5:1	KD-RC
SKD-3335033530-2F2F-R1	33.0 to 50.0	3.5	30	100	0.25	±5.0 / 20	1.5:1	KD-RC
SKD-1835033530-2F2F-R1	18.0 to 50.0	3.5	30	100	0.25	±5.0 / 20	1.5:1	KD-RC
SKD-4535532525-1919-R1	45.0 to 55.0	2.5	25	100	0.25	±5.0 / 30	1.5:1	KD-RU
SKD-5536532725-1515-R1	55.0 to 65.0	2.7	25	100	0.25	±5.0 / 30	1.5:1	KD-RV
SKD-7538533025-1212-R1	75.0 to 85.0	3.0	25	100	0.25	±5.0 / 30	1.5:1	KD-RE
SKD-9031043525-1010-R1	90.0 to 100.0	3.5	25	100	0.25	±5.0 / 30	1.5:1	KD-RW

CUSTOM DESIGNED MODELS:

Sage Millimeter's custom designed SPDT switch model numbers are configured per following format. Customers may refer to the format and specify their own model numbers accordingly when placing the order.

SKD- F1N F2N IL IS - CI CO - XY

F1N is the start frequency in MHz x 10N. For example: 10 GHz = 103

F2N is the stop frequency in MHz x 10N. For example: 40 GHz = 403

IL is the insertion loss in 1/10 dB. For example: 2.0 dB = 20

IS is the isolation in dB. For example: 35 dB = 35

CI is the input connector type. For example: K(F) = KF

CO is the output connector type. For example: K(M) = KM

X is for switch type. "A" is absorptive switch and "R" is for reflective switch.

Y is for factory reserve.

Example: SKD-1034032235-KFKM-R1 is a custom designed SPDT switch with RF frequency range of 10 to 40 GHz, insertion loss of 2.2 dB and isolation of 35 dB. The input and output of the RF connectors are K(F) and K(M) connector respectively. It is a reflective type. "1" is a factory assigned sequential number.