

SP4T Latching Electro-Mechanical Relay Switch
From DC to 40 GHz, 3 Watts with Indicators,
TTL, Self Cut Off, Diodes, 2.92mm

FMSW6320 is a Single Pole Four Throw (SP4T) 50 Ohm Terminated RF Coaxial Relay Switch that operates from DC to 40 GHz and can handle up to 3 Watts of CW input power at 40 GHz, in a Break Before Make condition. The design features a Latching Actuator with indicators, and is rated for 1M Life Cycles. Insertion Loss is specified from 0.2 dB max and Isolation from 70 dB min, with +28 Vdc operating voltage. Performance is guaranteed over -35°C to +85°C. The package interface uses solder terminals and 2.92 mm female connectors.



Electrical Specifications

Switch Type	SP4T, Absorptive
Actuator Type	Latching
Switching Sequence	Break Before Make
Actuator Options	Indicators, TTL Logic, Self Cut Off, Diodes
TTL Control	on: 2.4 to 5 Volts off: 0 to 0.8 Volts

Features:

- SP4T Absorptive Switch
- DC to 40 GHz Operating Frequency Range
- 1 M Cycles min

Applications:

- Test & Measurement
- Communications System
- Instrumentation

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts		300		mA
VSWR			2:1	
Insertion Loss			1	dB
Isolation	50			dB
Input Power (CW) (40 GHz)			3	Watts

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 6	6 - 12	12 - 18	18 - 26.5	26.5 - 40	GHz
VSWR, Max	1.3:1	1.4:1	1.5:1	1.7:1	2:1	
Insertion Loss, Max	0.2	0.4	0.5	0.7	1	dB
Isolation, Min	70	60	60	55	50	dB

Mechanical Specifications

Size	
Length	2.25 in [57.15 mm]
Width/Diameter	2.25 in [57.15 mm]
Height	2.375 in [60.33 mm]
Weight	0.529 lbs [239.95 g]
Body Material and Plating	Aluminum, Nickel
Operating Life	1,000,000 Cycles
Switching Time	15 ms Max

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Connectors

RF Connector Type	2.92mm Female
RF Connector Contact Material & Plating	Beryllium Copper, Gold
RF Connector Body Material & Plating	Passivated Stainless Steel

Environmental Specifications

Temperature

Operating Range	-35 to +85 deg C
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.

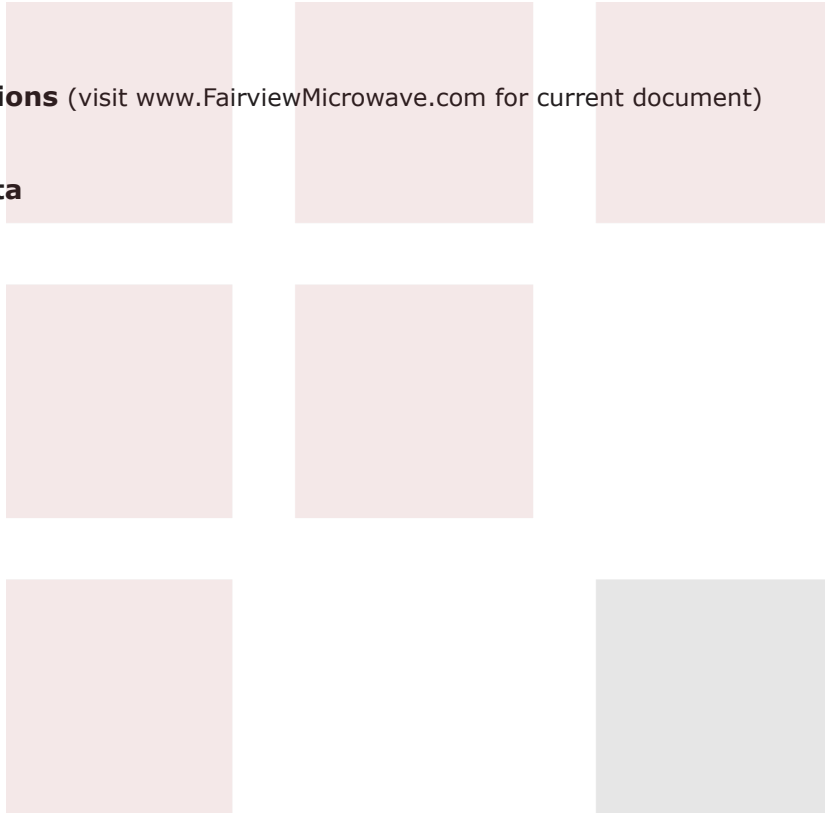


Compliance Certifications (visit www.FairviewMicrowave.com for current document)

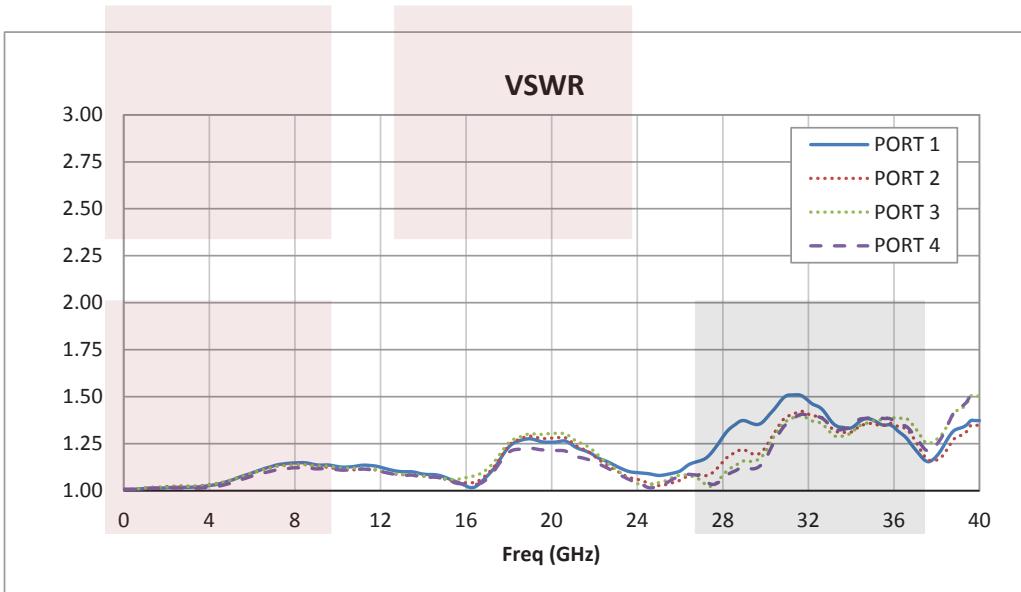
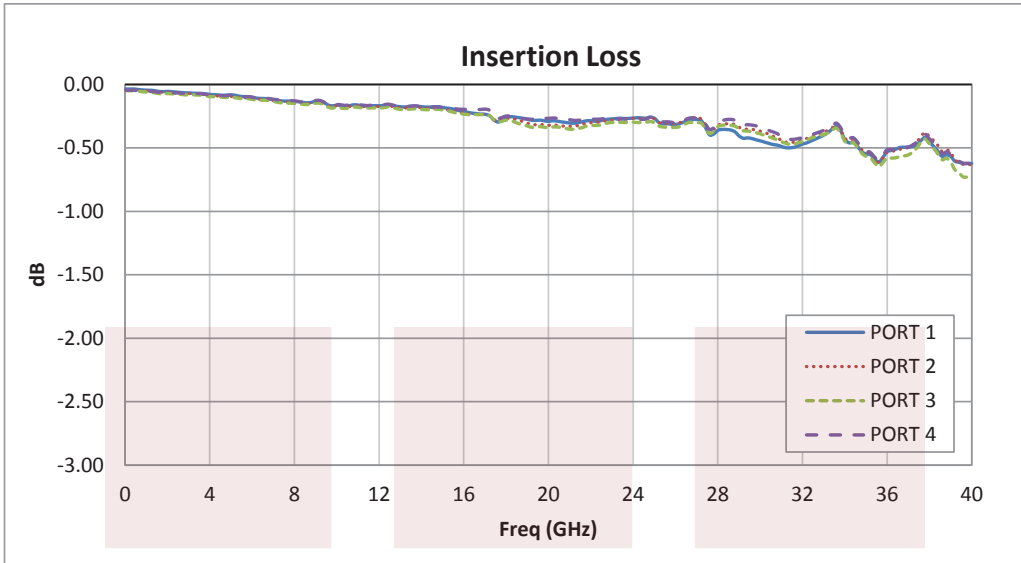
Not RoHS Compliant

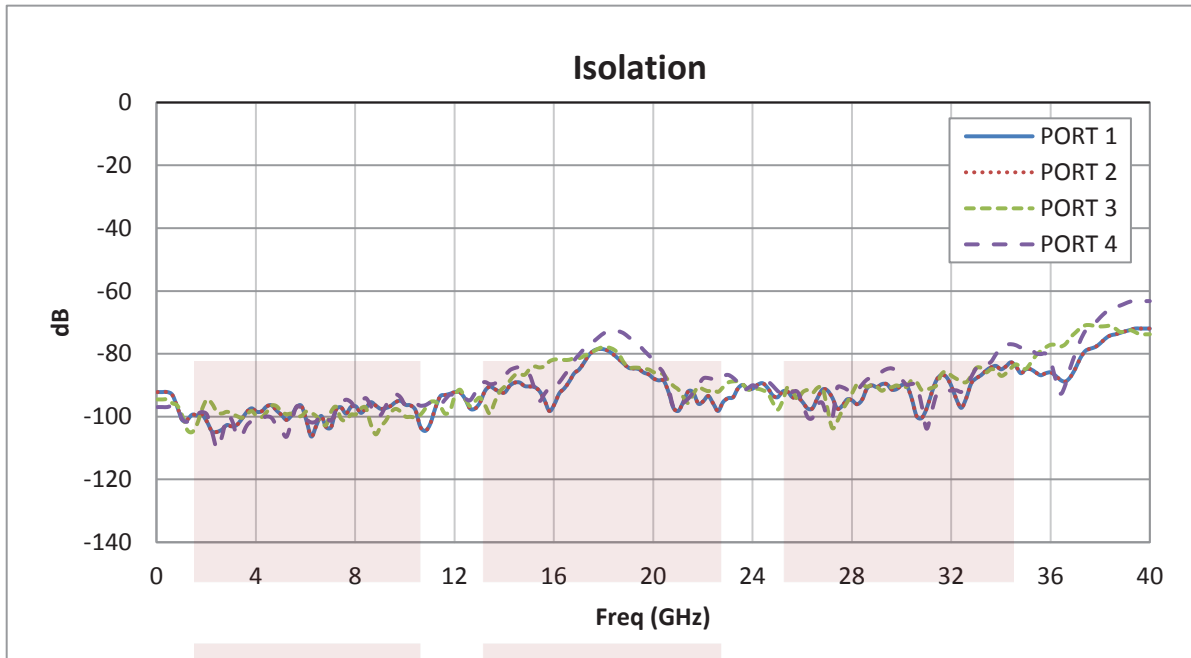
Plotted and Other Data

Notes:



Typical Performance Data



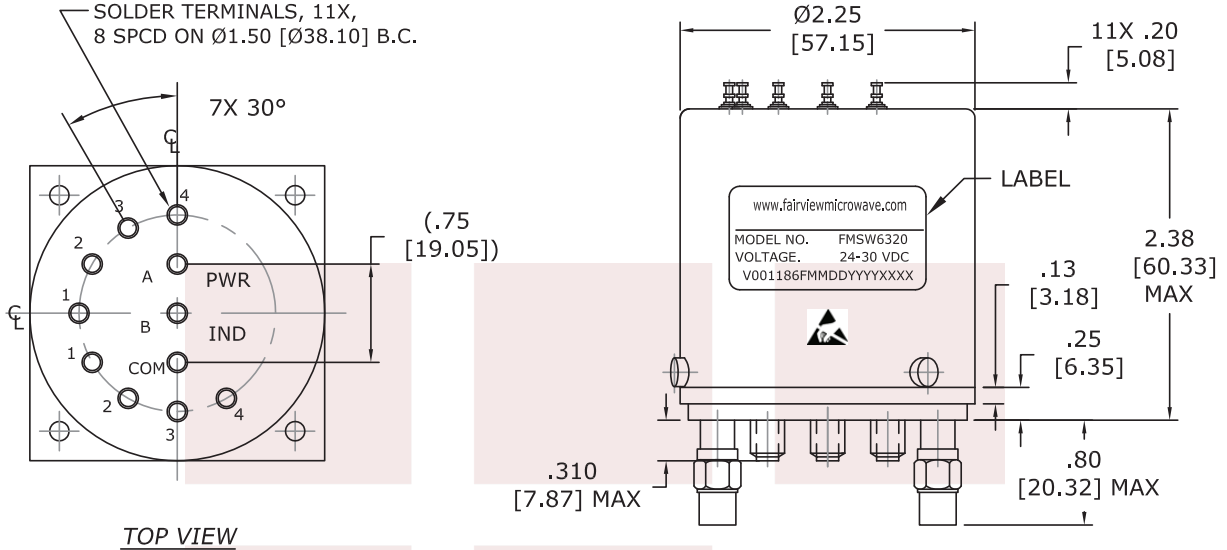


SP4T Latching Electro-Mechanical Relay Switch From DC to 40 GHz, 3 Watts with Indicators, TTL, Self Cut Off, Diodes, 2.92mm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SP4T Latching Electro-Mechanical Relay Switch From DC to 40 GHz, 3 Watts with Indicators, TTL, Self Cut Off, Diodes, 2.92mm FMSW6320](#)

URL: <http://www.fairviewmicrowave.com/sp4t-latching-electro-mechanical-relay-switch-indicators-ttl-self-cut-off-diodes-fmsw6320-p.aspx>

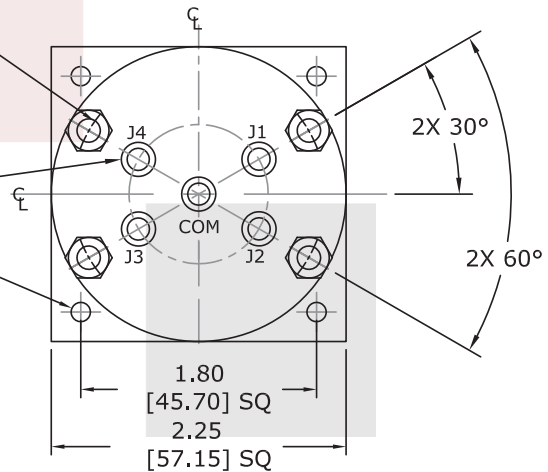
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50 OHM TERMINATION
4 PLCS ON Ø1.942 [Ø49.33] BC

"K" CONN FEM, 5X
4 SPCD ON Ø1.062 [Ø26.97] B.C.

4X Ø.147 [Ø3.73] THRU
MTG HOLES



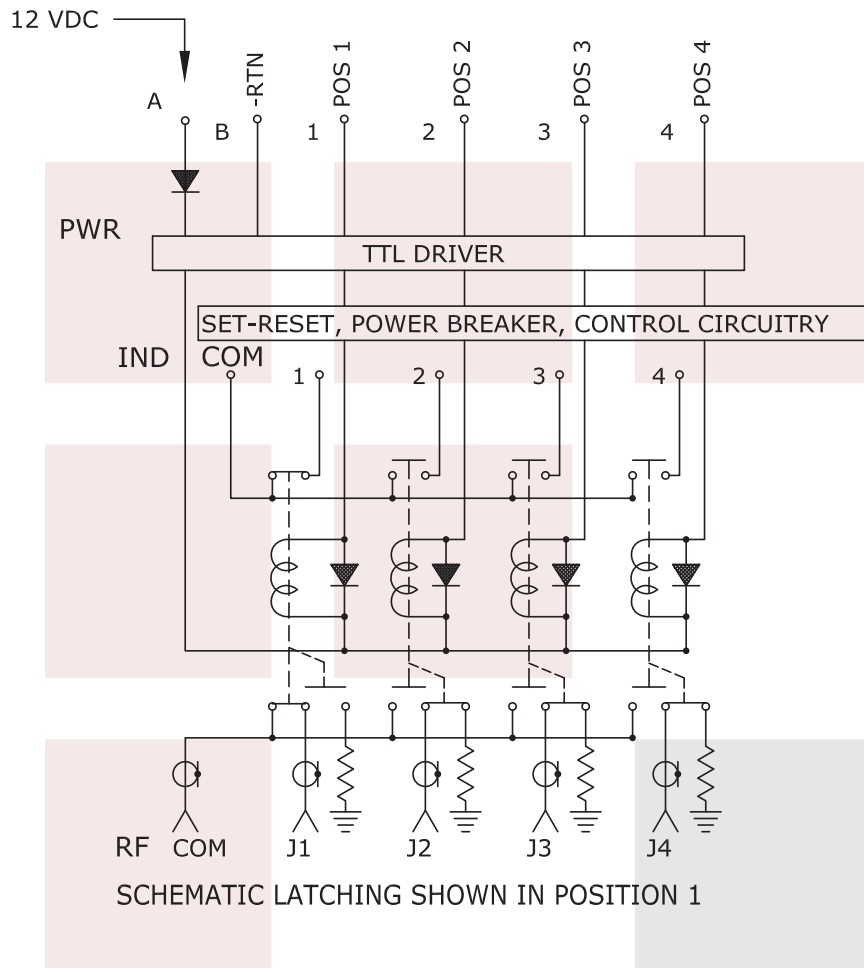
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

DECIMALS	ANGLES
.XX ± .03 (0.76)	±1°
.XXX ± .010 (0.254)	FRACTIONS ±1/16

HOLE DIAMETER	TOLERANCE
.0135 TO .125 (0.343 TO 3.175)	+.004 TO -.001 (+0.102 TO -.025)
.126 TO .250 (3.200 TO 6.350)	+.005 TO -.001 (+0.127 TO -.025)
.251 TO .500 (6.375 TO 12.700)	+.006 TO -.001 (+0.152 TO -.025)
.501 TO .750 (12.725 TO 19.050)	+.008 TO -.001 (+0.203 TO -.025)
.751 TO 1.000 (19.075 TO 25.400)	+.010 TO -.001 (+0.254 TO -.025)
1.001 TO 2.000 (25.425 TO 50.800)	+.012 TO -.001 (+0.305 TO -.025)

* THESE DIMENSIONS AND TOLERANCES SUPSEDE NOTE #1 ON TITLE BLOCK.

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CAD FILE	122115	SHEET	SCALE	N/A	SIZE A 2233



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