

Transfer Electromechanical Relay Latching Switch, +COM, DC to 26.5 GHz, 90W, 28VDC, SMA

The FMSW6586 is a Transfer electromechanical relay switch that operates across a broadband frequency range from DC to 26.5 GHz and can handle 90W of average power in a break before make condition. The 50 Ohm design supports a positive common (+COM) biasing configuration and features a Latching Actuator with a 5 million lifecycle rating. The Latching Actuator magnetically latches in place after the control voltage is removed. For power sensitive applications, this is the best actuator option. Impressive typical performance includes 0.4 dB insertion loss and isolation greater than 80 dB. This switch requires 28 Vdc bias voltage and operates over a temperature range of -25°C to +65°C. The rugged and compact package assembly supports SMA female connectors and solder terminal pins for DC control. And for highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for shock and random vibration.

Electrical Specifications (TA = +25°C, DC Voltage = 28 Vdc)

Switch Type Transfer
 Actuator Type Latching

Description	Min	Typ	Max	Units
Frequency Range	DC		26.5	GHz
Operating Voltage	26	28	30	Volts
Actuating Current @ 28 Volts		250		mA
VSWR		1.2:1	1.6:1	
Insertion Loss		0.4	0.8	dB
Isolation	60	80		dB
Switching Time		20		ms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 6	6 - 12	12 - 18	18 - 26.5		GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.6:1		
Insertion Loss, Max	0.2	0.3	0.5	0.8		dB
Isolation, Min	80	70	65	60		dB

Mechanical Specifications

Size
 Length 2.05 in [52.07 mm]
 Width/Diameter 1.5 in [38.1 mm]
 Height 0.52 in [13.21 mm]
 Weight 0.108 lbs [48.99 g]

Connectors

RF Connector Type SMA Female
 Control Connector Solder Terminals



Features:

- Transfer Electromechanical Relay Switch
- DC to 26.5 GHz Frequency Range
- Latching Actuator
- Positive Common (+COM) Configuration
- 5M Lifecycle Rating
- Insertion Loss 0.4 dB typ
- Isolation > 80 dB typ
- VSWR as low as 1.2:1 max
- Solder Terminal Pins for DC Control
- 28 Volt DC Bias
- SMA Female Connectors
- -25°C to +65°C Operating Temperature
- 90 Watt Average Power Handling
- 50 Ohm Design
- Hot Switching Capability - Consult Factory
- S-Parameter Data available upon request
- Rugged Design meets Mil-STD-202 Test Conditions

Applications:

- Aerospace & Defense
- Test & Measurement
- Microwave Radio Systems
- Military & Commercial Communication Systems
- Research & Development
- SATCOM
- Wireless Communications
- Enterprise
- IoT

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Environmental Specifications

Temperature

Operating Range -25 to +65 deg C
Storage Range -55 to +100 deg C

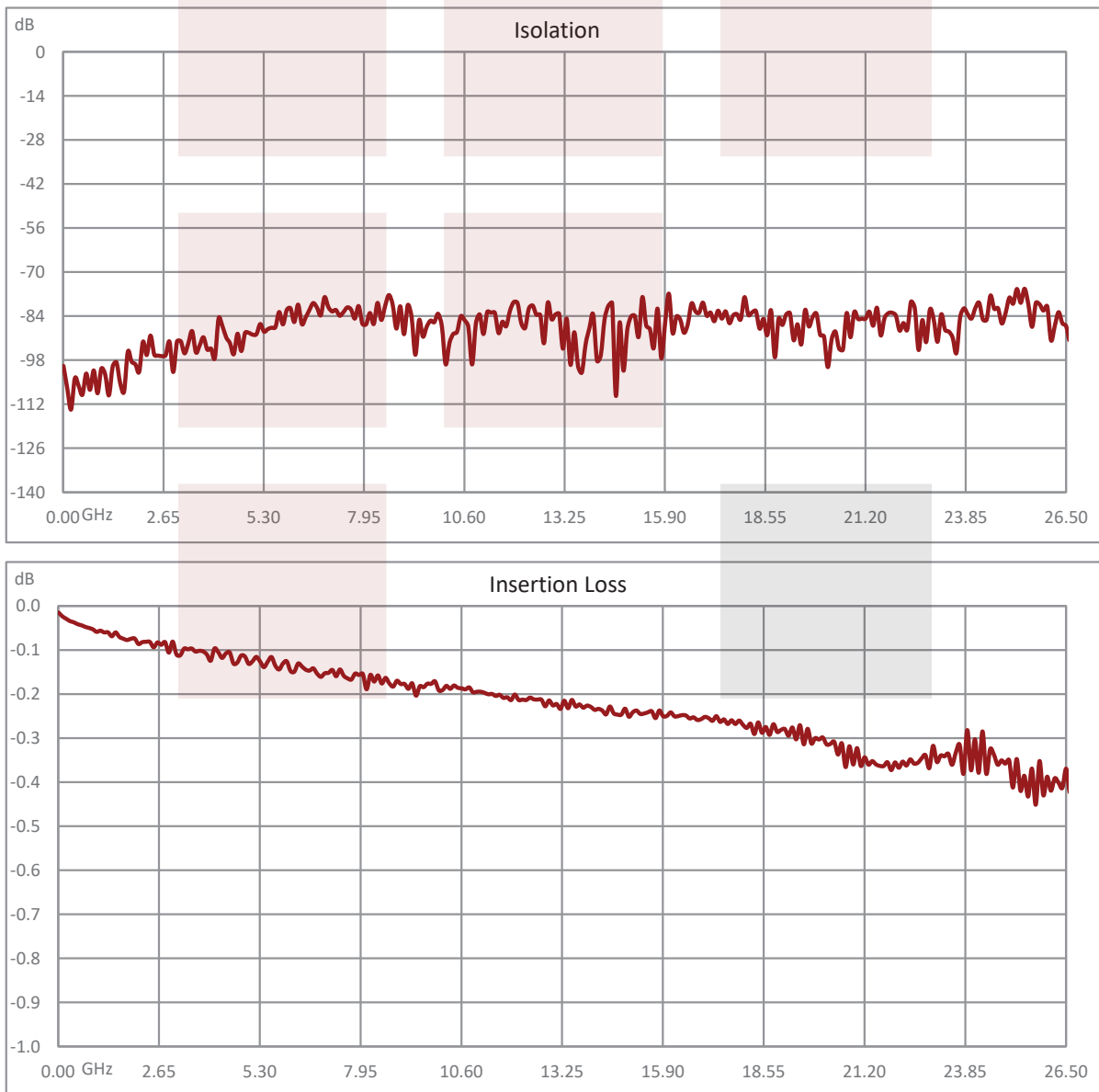
Shock MIL-STD-202 Method 213, Condition D, 500G (non oper)
Vibration MIL-STD-202 Method 204, Condition D, 10G RMS (non oper)

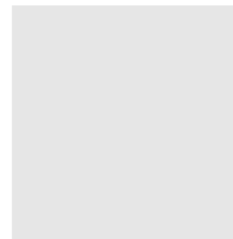
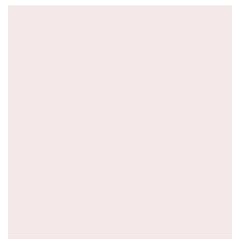
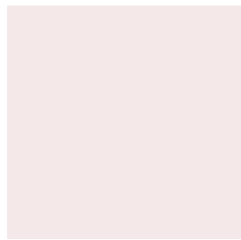
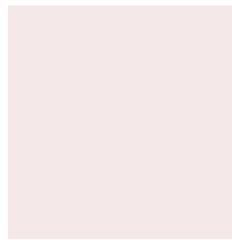
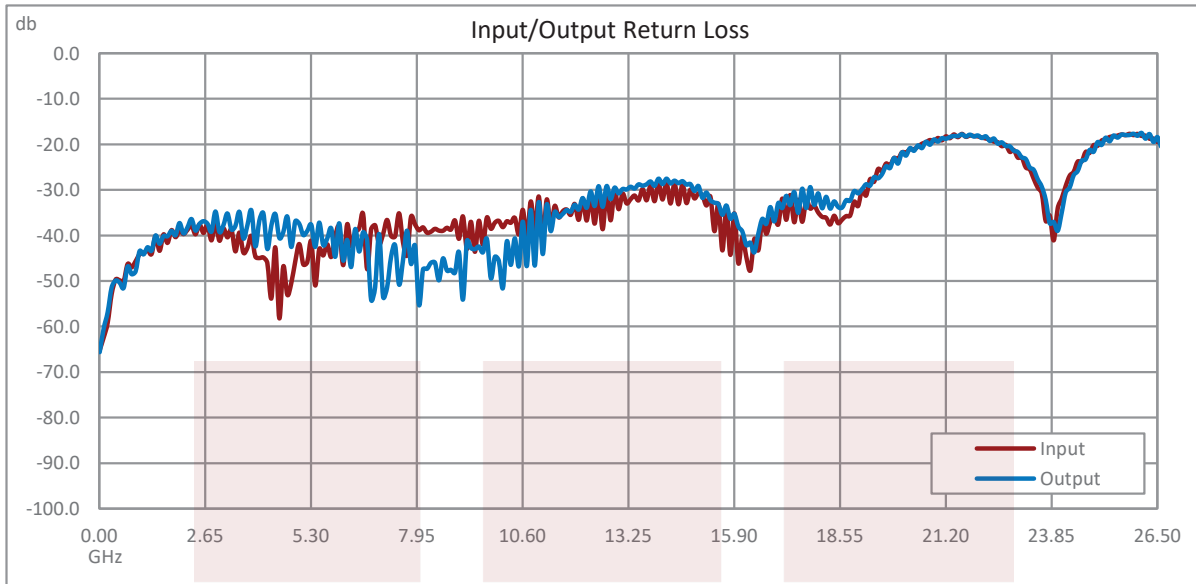
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

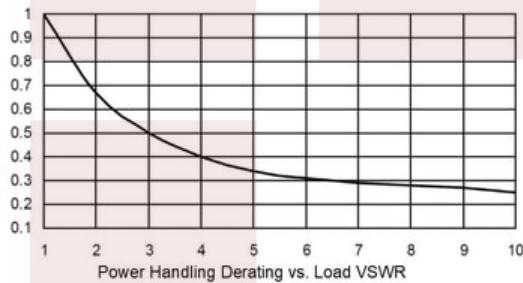
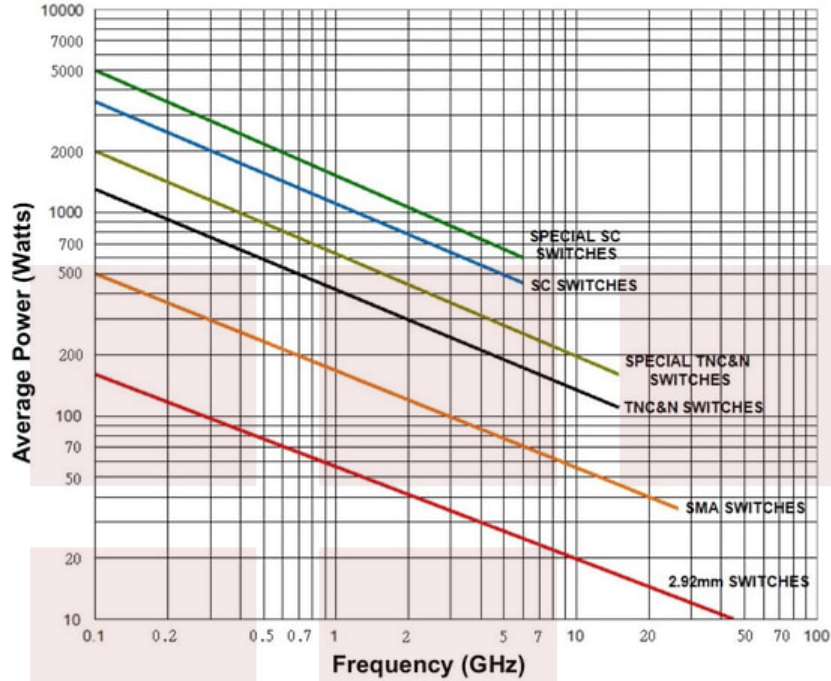
Typical Performance Data





Power Handling vs. Frequency

Power Handling vs. Frequency



Power handling chart and derating curves based on the following conditions:

- Ambient temperature: 40°C or less
- Altitude: Sea level
- Load VSWR: 1.20:1 Maximum
- Relative Humidity: 40-50%
- Cold switching: RF signal off

Note: specifications subject to change without notice

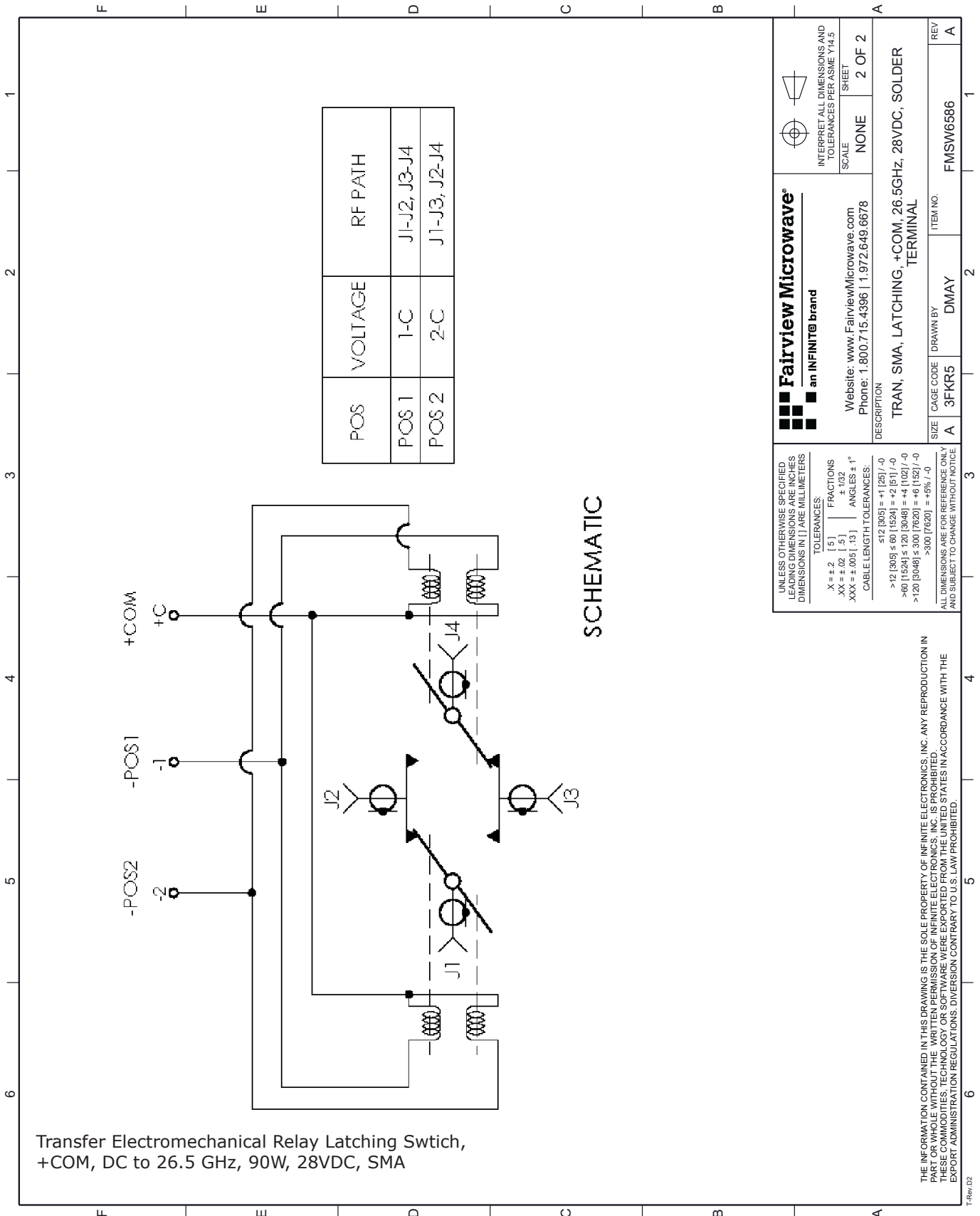
Transfer Electromechanical Relay Latching Swtich, +COM, DC to 26.5 GHz, 90W, 28VDC, SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.



For additional information on this product, please click the following link: [Transfer Electromechanical Relay Latching Swtich, +COM, DC to 26.5 GHz, 90W, 28VDC, SMA FMSW6586](#)

URL: <https://www.fairviewmicrowave.com/transfer-latching-26.5-ghz-electro-mechanical-relay-switch-28v-sma-fm-sw6586-p.aspx>

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 Fairview Microwave® an INFINITE® brand Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 2 OF 2	DESCRIPTION: TRAN, SMA, LATCHING, +COM, 26.5GHZ, 28VDC, SOLDER TERMINAL
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [] ARE MILLIMETERS. TOLERANCES: .X ± .2 [.5] FRACTIONS ± .132 .XX ± .02 [.5] ANGLES ± 1° .XXX ± .005 [.13] CABLE LENGTH TOLERANCES: $512 [305] = +1 [25] / -0$ $>12 [305] \le 60 [1524] = +2 [51] / -0$ $>60 [1524] \le 120 [3048] = +4 [102] / -0$ $>120 [3048] \le 300 [7620] = +6 [152] / -0$ >300 [7620] = +5% / -0	ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.
SIZE: A CAGE CODE: 3FKR5 DRAWN BY: DMAY	ITEM NO.: FMSW6586	REV: A