

**Field Replaceable SMA Transfer PIN Diode Switch
 Absorptive From 4 GHz to 8 GHz Rated at +30 dBm**

FMSW6289 is a Transfer Absorptive Switch that operates from 4 GHz to 8 GHz. Performance includes 1.9 dB max insertion loss, 75 dB min isolation, and 100 nsec max switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -55°C to +85°C and dual voltage controls of +5 VDC and -15 VDC are required. The rugged package is designed to meet a series of MIL-STD-202F environmental conditions including humidity, shock, vibration, and temperature cycle. Package interfaces include solder terminals and female SMA connectors.



Electrical Specifications

| Description | Min | Typ | Max | Units |
|----------------------------|-----|-----|-------|-------|
| Frequency Range | 4 | | 8 | GHz |
| Impedance | | 50 | | Ohms |
| VSWR | | | 1.6:1 | |
| Insertion Loss | | | 1.9 | dB |
| Isolation | 75 | | | dB |
| Switching Time | | | 100 | ns |
| Input Power (CW) | | | 1 | Watts |
| Positive Operating Voltage | | 5 | | Vdc |
| Negative Operating Voltage | | -15 | | Vdc |
| Operating Temperature | -55 | | +85 | deg C |

Features:

- Transfer Absorptive Switch
- 4 GHz to 8 GHz
- Insertion Loss 1.9 dB max
- Isolation 75 dB min
- Input Power 30 dBm CW max
- Field Replaceable Connectors

Applications:

- Test & Measurement
- Military Communication
- Commercial Communication
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

Mechanical Specifications

| | |
|--------|---------------------|
| Length | 1.2 in [30.48 mm] |
| Width | 1.2 in [30.48 mm] |
| Height | 0.5 in [12.7 mm] |
| Weight | 0.083 lbs [37.65 g] |
| Finish | Blue Paint |

Configuration

| | |
|---------------------|----------------------|
| Design | Absorptive, Transfer |
| RF Connector | SMA Female |
| RF Connector Option | Field Replaceable |
| Control Connector | Solder Pin |

Environmental Specifications

Temperature

| | |
|-----------------|-------------------|
| Operating Range | -55 to +85 deg C |
| Storage Range | -65 to +125 deg C |

| | |
|---------------------|--|
| Humidity | MIL-STD-202F, Method 103B, Condition B |
| Shock | MIL-STD-202F, Method 213B, Condition B |
| Vibration | MIL-STD-202F, Method 204D, Condition B |
| Altitude | MIL-STD-202F, Method 105C, Condition B |
| Temperature Cycling | MIL-STD-202F, Method 107D, Condition A |

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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)
REACH Compliant 12/17/2015

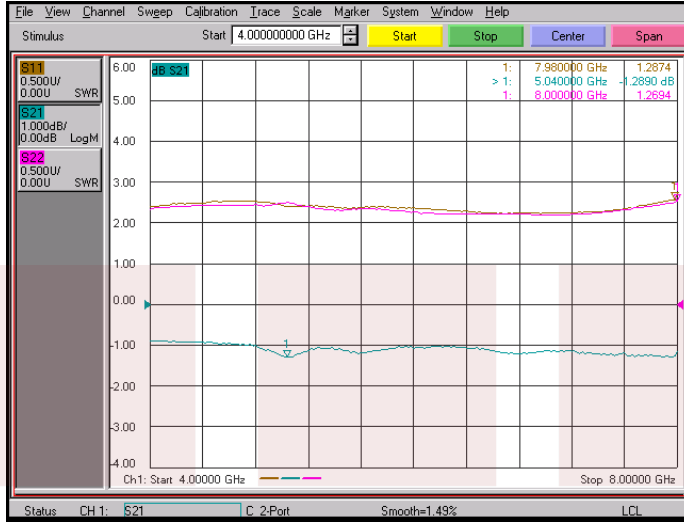
Plotted and Other Data

Notes:

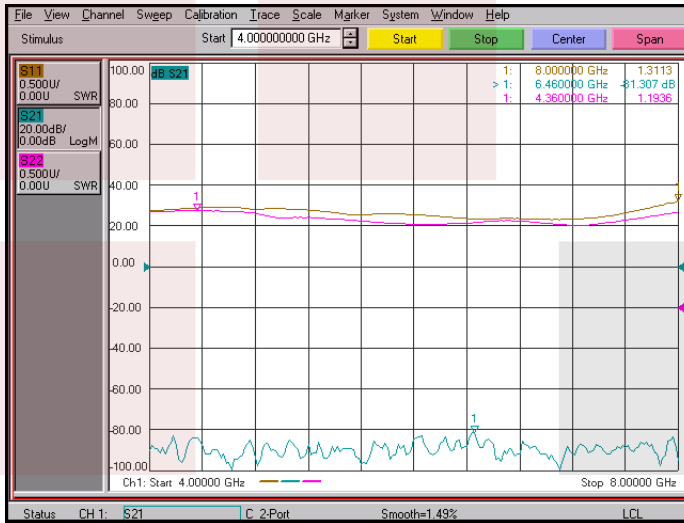


Typical Performance Data

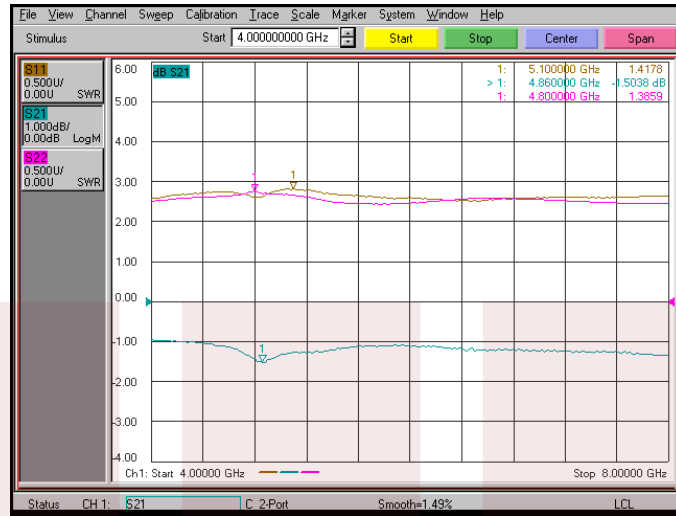
(J1 – J2) Insertion Loss and Return Loss



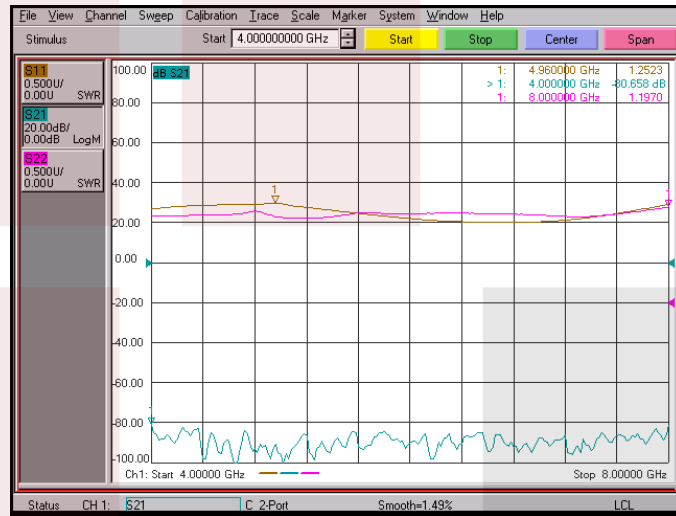
(J1 – J2) Isolation and Termination Return Loss



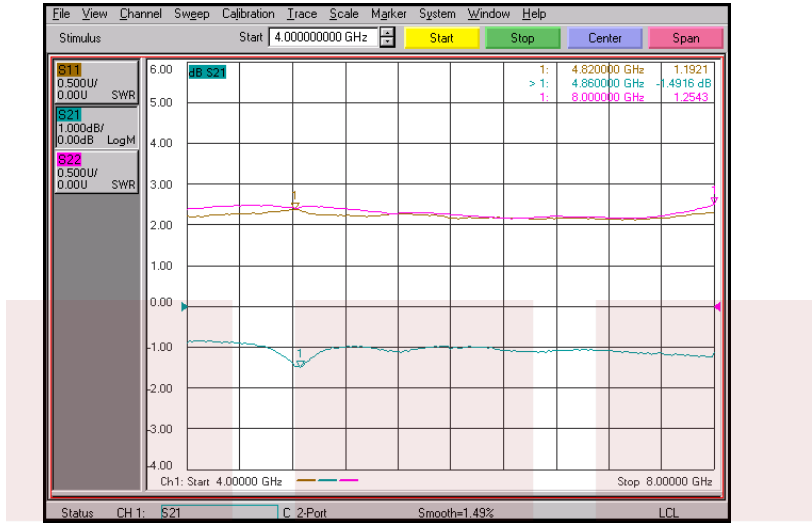
(J3 – J4) Insertion Loss and Return Loss



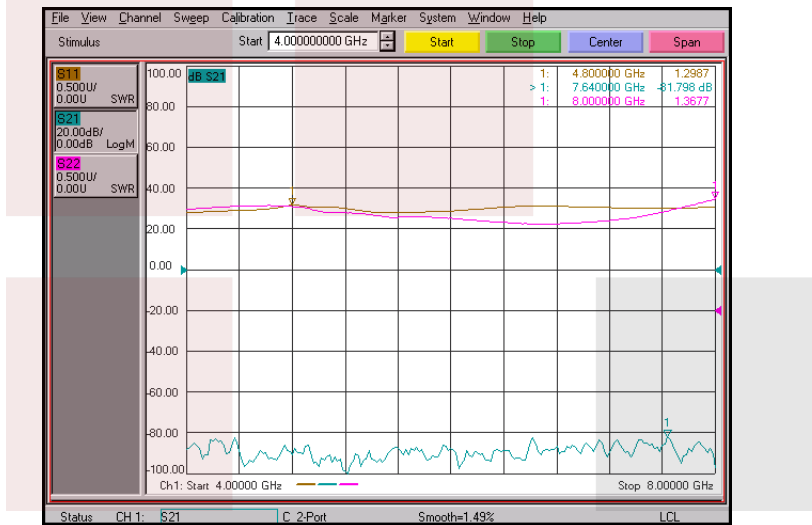
(J3– J4) Isolation and Termination Return Loss



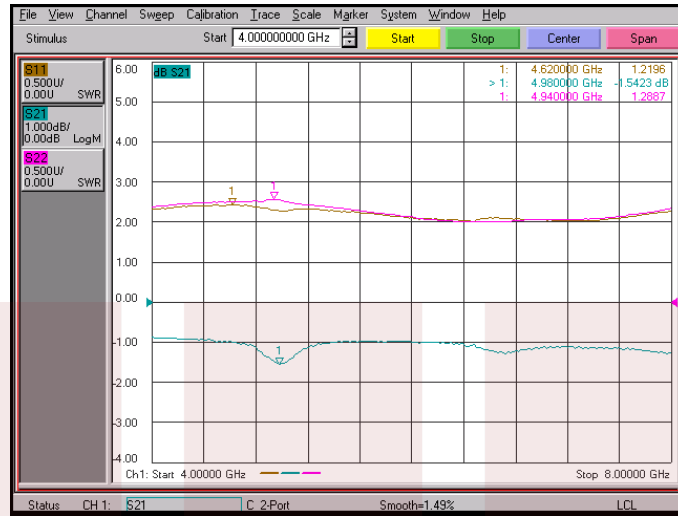
(J1 – J4) Insertion Loss and Return Loss



(J1 – J4) Isolation and Termination Return Loss



(J2 – J3) Insertion Loss and Return Loss



(J2 – J3) Isolation and Termination Return Loss

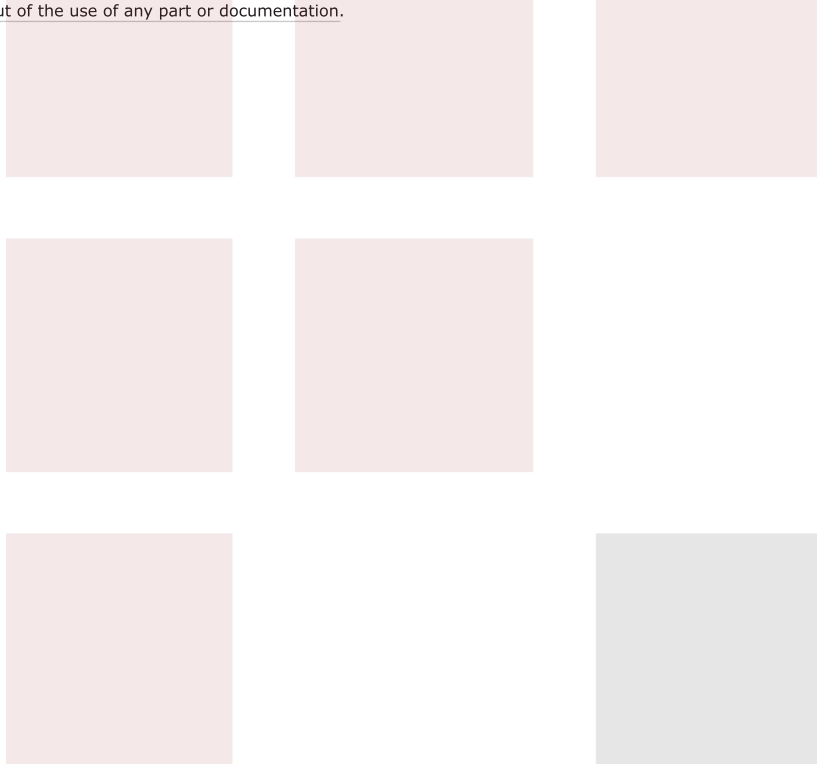


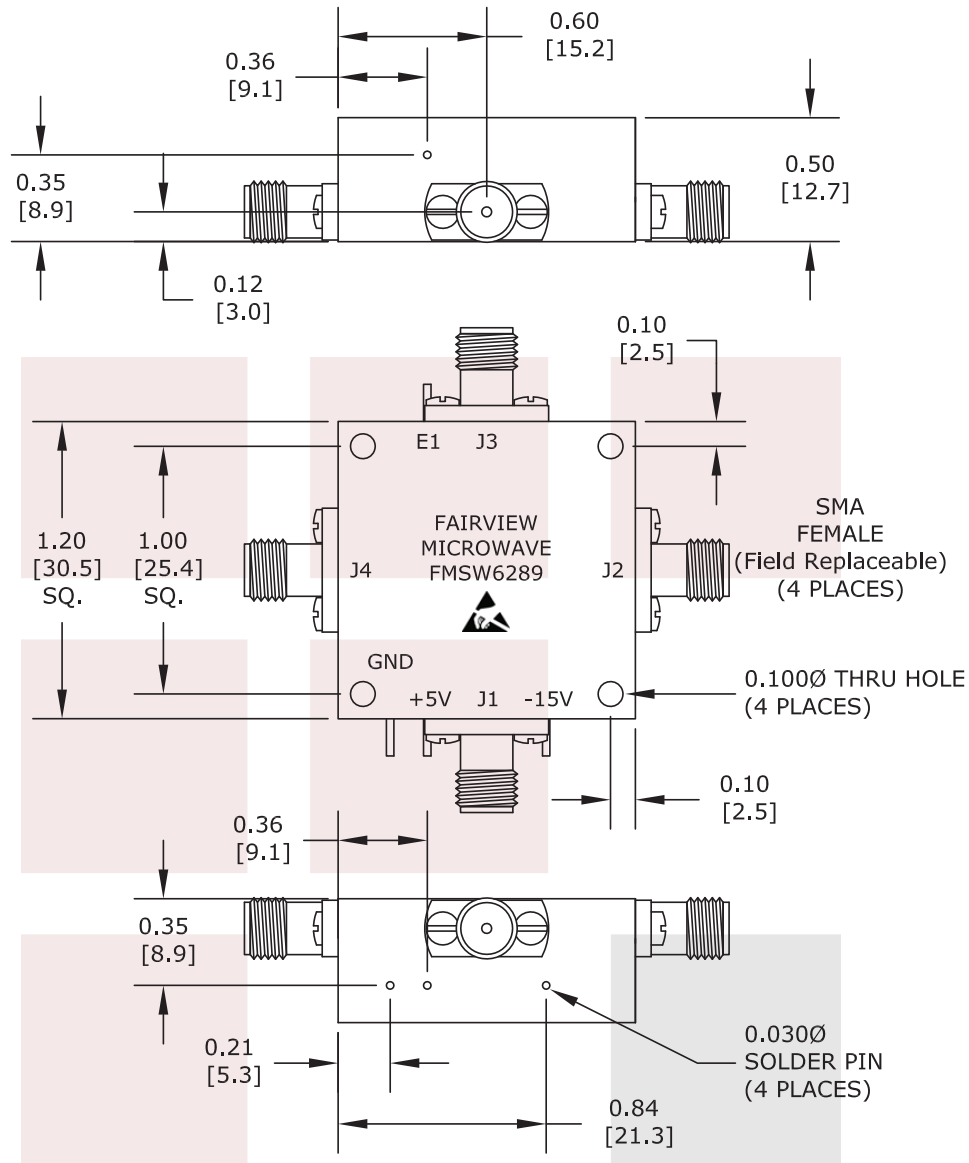
Field Replaceable SMA Transfer PIN Diode Switch Absorptive From 4 GHz to 8 GHz Rated at +30 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Field Replaceable SMA Transfer PIN Diode Switch Absorptive From 4 GHz to 8 GHz Rated at +30 dBm FMSW6289](#)

URL: <http://www.fairviewmicrowave.com/sma-transfer-pin-diode-switch-absorptive-8-ghz-30-dbm-fmsw6289-p.aspx>

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| TTL LOGIC | INSERTION LOSS | ISOLATION |
|-----------|----------------|----------------|
| 0 | J1-J2 J3-J4 | J1-J4 J2-J3 |
| 1 | J1-J4 J2-J3 | J1-J2 J3-J4 |

ALL DIMENSIONS ARE IN INCHES.
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

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

| | | | |
|---|--------|---|---------------------------|
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| TITLE Field Replaceable SMA Transfer PIN Diode Switch Absorptive From 4 GHz to 8 GHz Rated at +30 dBm | | DWG NO FMSW6289 | CAGE CODE 3FKR5 |
| CAD FILE | 041916 | SHEET | SCALE N/A SIZE A 2233 |