

Absorptive 0.05-20GHz Coaxial SP160T Switch



Features

- Ultra Wide Band Operation 0.05-20GHz
- TTL compatible driver include
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -45°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000ft available upon request.

Electrical Specifications, TA = +25° C, With Vdd = +5V, Vss = -5V & VCTL = 0/ +5V

| Description | PN: RFSP160TA0020G | | | | |
|--|----------------------------------|------|--------|-------|--|
| | SP160T Absorptive Switch | | | | |
| | Low Power Cold Switching | | | | |
| Parameters | Min | Тур. | Max | Units | |
| Frequency Range | 0.05-20 | | GHz | | |
| Insertion Loss | | 28 | | dB | |
| Insertion Loss Temperature Coefficient | | 0.02 | | dB/°C | |
| Isolation | 50 | 60 | | dB | |
| Input VSWR | | 1.5 | 2.0 | ratio | |
| Output VSWR | | 1.5 | 2.0 | ratio | |
| RF Input power (CW) | | | 0.5 | w | |
| Power Dissipation (CW) | | | | W | |
| Po.1dB | | | 30 | dBm | |
| IM ₃ | | | | dBc | |
| IIP3 | | 50 | | dBm | |
| Switching Speed | | | 70 | ns | |
| Weight | 1 | | ounces | | |
| Impedance | 50 | | Ω | | |
| Biasing(+5V/-5V) | 1 | | mA | | |
| Input /Output Connector | SMA-Female/SMA-Female (Standard) | | | | |
| Finishing | Gold Plating | | | | |
| Material | Aluminum | | | | |
| Seal | Hermetically Sealed (optional) | | | | |

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Absolute Maximum Ratings

| Biasing | +5V±10%/-5V±10% |
|---------------------------|-----------------|
| TTL Control Voltage | o~o.8V/2~5V |
| Operating Temperature(°C) | -45 ~ +85 |
| Storage Temperature(°C) | -50 ~ +125 |

Ordering Information

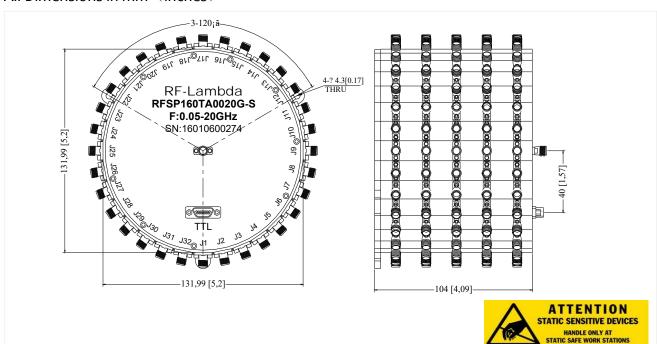
| Part No | ECCN | Description |
|----------------|-------|---------------------------------------|
| RFSP160TA0020G | EAR99 | SP160T 0.05-20GHz PIN Diode Switch |

Outline Drawing:

All Dimensions in mm (inches)

Environment specifications

| Operational Temperature (°C) | -45 ~ +85 |
|---------------------------------|---|
| Storage Temperature (°C) | -50 ~ +125 |
| Altitude | 30,000 ft. (Epoxy Seal Controlled environment) |
| | 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional) |
| Vibration | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |
| Humidity | 100% RH at 35c, 95%RH at 40°C |
| Shock | 20G for 11msc half sin wave,3 axis both directions |



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