

# ESS6018A3 Bias Schottky Diode Detector

SMA-F/SMA-M Negative Output Polarity  
6.0 to 18.0 GHz Broadband



## Technical Characteristics

| Product Features                            |
|---|
| High Dynamic Range @100 uA typ. bias        |
| Flat Frequency Response                     |
| Ultra Wideband and Ultra fast               |
| Low Video Output Resistance (350 ohms typ.) |
| Negative Polarity is Standard               |
| High Reliability Hermetically Sealed Coax   |
| RoHS Compliant                              |

| Max. Ratings           |   |
|------------------------|---|
| Storage Temperature:   | Storage temperature range: -65°C to +125°C  |
| Operating Temperature: | Operating temperature range: -55°C to +90°C |
| Maximum input power:   | Maximum input power: 200mW                  |

## Product Export Classification

ECCN: EAR99 (Unless otherwise specified)  
HTS: 8542330000

## Electrical Specifications

| Parameters             | Freq. (GHz)     | Min. | Typical | Max. | Units  |
|------------------------|-----------------|------|---------|------|--------|
| Voltage Sensitivity    | 6.0 to 18.0 GHz | 1600 |         |      | mV/mW  |
| Bias                   |                 |      | 100     |      | μA     |
| Tangential Sensitivity | 6.0 to 18.0 GHz |      | -52     |      | dBm    |
| Flatness               | 6.0 to 18.0 GHz |      | 0.4     |      | +/-dB  |
| Video Capacitance      |                 |      | 10      |      | pF     |
| CW Power Handling      |                 |      |         | 200  | mWatts |
| Operating Temperature  |                 | -55  |         | +125 | °C     |

## NOTES:

1. TSS is measured with a 2 MHz video bandwidth and 2dB NF amplifier.
2. Typical values are measured at +25°C and are not guaranteed.

## Outline Drawing

