## **DT2060A3 Tunnel Diode Detector**

2.0 to 6.0 GHz Negative Polarity, SMA Connector, Bias Detector with 50  $\Omega$  SMA Male to SMA Female Female Video Out Operating from 2.0 to 6.0 GHz

#### "A3" pkg. P/N DT2060A3



#### Product Export Classification ECCN: EAR 99 (Unless otherwise specified) HTS: 8542330000

### CONFIGURATION

| conneolivition            |              |
|---------------------------|--------------|
| Bias Type                 | No Bias      |
| Detector Polarity, Note 3 | Negative [-] |
| Body Style                | Coaxial      |
| RF Input Connector        | SMA [Male]   |
| RF Input Impedance        | 50 Ω         |
| Video Output Connector    | SMA [Female] |
| Detector Type             | Octave Band  |

NOTES:

1. TSS is measured with a video amplifier having at least 50dB gain, <3dB NF and 2 MHz video bandwidth.

2. Typical values are measured at +25°C and are not guaranteed.

3. Negative output polarity is standard. Add P to the end of the model number for positive polarity, ex. DT2060PA3 Pos(+)

4. To select a package, refer to pg. 2 and insert package name, ex. NB. Order P/N D2060NB (polarity + or -)

#### A3 Outline Drawing

### PRODUCT FEATURES

#### No bias required

Extremely low video output resistance (125  $\Omega$  typ)

Extremely fast pulse response (5 nsec risetime typ)

Excellent frequency response

Excellent dynamic range & loaded voltage output sensitivity

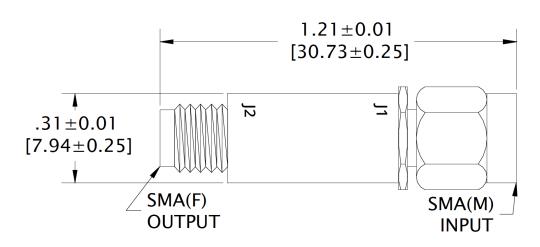
Negative Polarity is Standard

High Reliability Hermetically Sealed Coax

RoHS Compliant

| ELECTRICAL SPECIFICATIONS         |            |
|-----------------------------------|------------|
| Frequency Range [GHz]             | 2.0 to 6.0 |
| Voltage Sensitivity [mV/mW], typ. | 1000       |
| Tss [dB], Note 1, typ.            | -50        |
| VSWR, typ.                        | 2.5:1      |
| Flatness [±dB], typ.              | 0.5        |
| Video Cap [pF], typ.              | 20         |

| MAXIMUM RATINGS                |                  |
|--------------------------------|------------------|
| Max. Input Power [dBm]         | 13               |
| Storage Temperature [deg. °]   | -65° to +125 ° C |
| Operating Temperature [deg. °] | -65° to +115 ° C |
| Specifications @ [° C]         | 25               |



#### About EclipseMDI

ECLIPSE Microdevices is located in San Jose, California. ECLIPSE has been developing high performance analog semiconductors for use in wireless radio frequency (RF), microwave, and millimeter wave for commercial and industrial applications. ECLIPSE has formed a strategic alliances - with foundries that features leading state-of-the-art process technologies and with manufacturing facilities for high-volume production of innovative RFIC's.





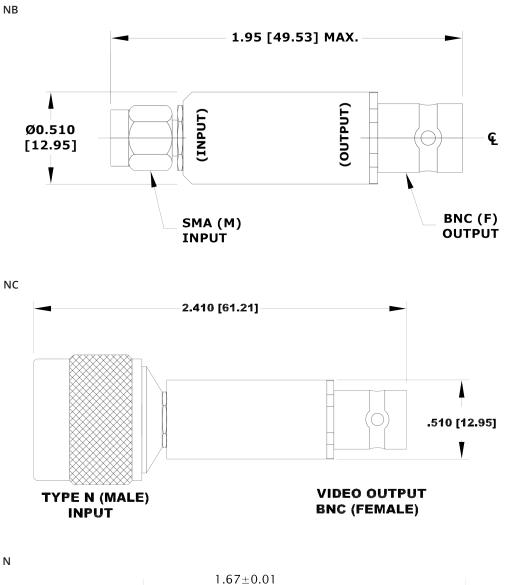


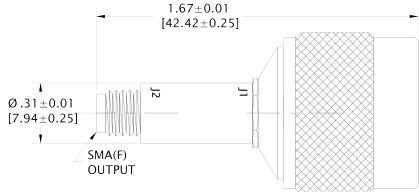
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**Outline Drawings** 





TYPE "N" MALE - INPUT CONNECTOR

www.eclipseMDI.com

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