

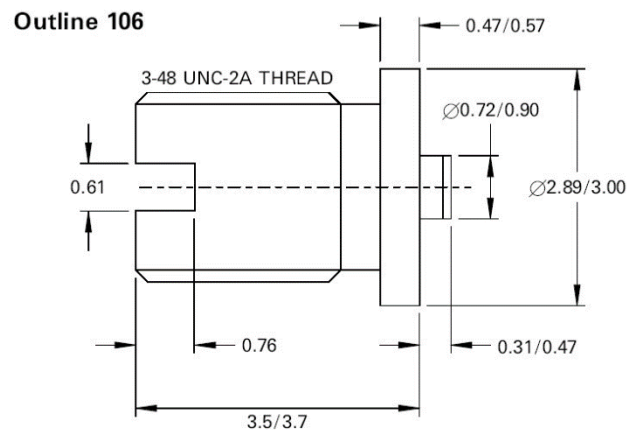
Linwave DC1279F-T94 Gunn Diode 94GHz

LW36-600006

DESCRIPTION

Gallium Arsenide graded gap Gunn diode assembled in a custom package for second harmonic operation at 94GHz in high stress applications. The diode is ideally suited for use in a high mechanical shock environment if mounted perpendicular to the axis of travel.

Top cap is positive polarity.



NOTES

1. The typical performance parameters indicated in the table overleaf can be customised to the user's requirements. The table shows typical values that can be achieved in a standard test cavity. Other variations may be possible using a customer specific test cavity.
2. Threshold current is defined as the maximum forward current in the DC current/ voltage characteristics.
3. A spot test frequency +/- 10% must be specified on the purchase order between the upper and lower limits which Linwave can test between.
4. Operating voltage is typically 4 V to 5 V at 94 GHz though the devices will be tested at the optimum value.
5. Tested in waveguide 27 second harmonic cavity.
6. Linwave Technology would prefer to test the gunn diode in the customer's own oscillator test cavity wherever practicable, to ensure it meets their operational requirements.

Linwave reserves the right to make changes, without notice, in the products, including circuits, standard cells, and/or software, described or contained herein in order to improve design and/or performance.

Data sheet Iss 02, dated 16/08/19 DS00-600006-02, No. 4263

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Typical Electrical Specification (All tests shall be made at $T_{amb} = 23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)

			Min (Typical)	Max (Typical)	
Operating Current	At Operating Voltage $V_G = 4$	I_{OP}		950	mA
Output Power	See Note 5	P_{OUT}	50		mW
Operating Frequency	See Note 3- at $V_G = 4$	F_{OP}	93	95	GHz
Threshold Current	See Note 2	I_{th}		1200	mA
Operating Voltage	See Note 4	V_G	4	5	V
Start-Up Voltage		V_{ST}		3	V

Absolute Maximum Ratings

Axial Acceleration.	18,000g (10ms ca form of sine).
Radial Acceleration.	5,000g (70 seconds max.).
Spin Acceleration.	337,000 rad/sec ² (10ms Max.).
Operational Temperature.	-40°C min./+75°C max.

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