

Annexure

for

THz Range GaAs Schottky Diodes

Indent Ref No: SAC/DPUR/2017003963

SPECIFICATIONS

1.0 Specifications

a. Anti-parallel GaAs Schottky Diodes

Parameters	Specifications
<i>Diode Type</i>	Anti-parallel GaAs Schottky Diode
<i>Rs Series Resistance</i>	15 Ohm (max.)
<i>C_{j0} Junction capacitance</i>	1.5 fF (max.)
<i>Ideality factor</i>	1.2 (max)
<i>Saturation current</i>	vendor to specify
<i>V_f Forward turn on voltage (I_f @ 1uA)</i>	0.75 V (Max)
<i>Max. Size (L x W x T)</i>	360 (um) x 150 (um) x 100 (um)
<i>Qualification Level</i>	Commercial Grade
<i>Attachment method</i>	The diodes should be suitable for attachment on gold metallized pattern of substrates with the following methods: (1) Flip-chip bonding (2) Gold Bonding (3) Epoxy attachment

b. Single GaAs Schottky Diodes

Parameters	Specifications
<i>Diode Type</i>	Single GaAs Schottky Diode
<i>Rs Series Resistance</i>	15 Ohm (max.)
<i>Cj0 Junction capacitance</i>	1.5 fF (max.)
<i>Ideality</i>	1.2 (max)
<i>Saturation current</i>	vendor to specify
<i>Vf Forward turn on voltage (If @ 1uA)</i>	0.75 V (Max)
<i>Max. Size (L x W x T)</i>	360 (um) x 150 (um) x 100 (um)
<i>Qualification Level</i>	Commercial Grade
<i>Attachment method</i>	The diodes should be suitable for attachment on gold metallized pattern of substrates with the following methods: (1) Flip-chip bonding (2) Gold Bonding (3) Epoxy attachment

NOTE:

1. The quotations must be provided in the slabs of 1-25, 26-50, 51-75 and 76-100.
2. The order quantity may be changed from the present quantity according to requirement of SAC at the time of placing the purchase order.
3. Vendor should provide point by point compliance to each items of this document.
4. Following should be given along with quote:
 - a. Detailed datasheets
 - b. Diode parameters for Design Software like ADS or Microwave Office.
 - c. Links of the published papers where these diodes where used.
 - d. Description of deviations from the indent specifications, if any.
 - e. Application notes.

2.0 Deliverable Goods:

The deliverables shall consist of:

- (i) Anti-Parallel Schottky Diodes
- (ii) Single Schottky Diodes
- (iii) Certificate of Conformance

3.0 Delivery Schedules:

- ❖ 12 weeks after placement of purchase order.

PACKAGING STORAGE & TRANSPORTATION

Each component shall be packaged in order to protect the device against mechanical and environmental damage.

Further, the individual packages and the intermediate packages shall be fixed within the shipping package, which shall be resistant to mechanical shocks, humidity and dust.

In addition to other mandatory shipping marking, the following additional marking shall appear on the shipping package in bold letters.

FRAGILE

HANDLE WITH CARE

**TO BE OPENED UNDER CLEAN ENVIRONMENT WITH ESD PROTECTION
ONLY**

STORE IN A COOL AND DRY PLACE

It is to be noted that "Pink poly-foam" shall not be used for packing of the individual devices, as it has a corrosive effect on gold plating of the device body and leads.

The shipping documentation shall be enclosed in the shipping package.