

UMZ6.8N

Silicon epitaxial planar

Technical drawing of a 4-hole 1.5mm pitch 1.8mm wide 80mm long PCB. The drawing includes a top view, a side view, and a 3D perspective view. The top view shows a rectangular board with four circular holes. The dimensions are as follows:

- Hole pitch: 4.0 ± 0.1 mm
- Hole diameter: 2.0 ± 0.05 mm
- Board width: 1.8 ± 0.1 mm
- Board length: 80 ± 0.2 mm
- Hole diameter (inner): 1.1 ± 0.1 mm
- Hole diameter (outer): 1.55 ± 0.1 mm
- Distance from hole center to board edge: 1.75 ± 0.1 mm
- Distance from hole center to board edge (inner): 3.2 ± 0.05 mm
- Distance from hole center to board edge (outer): 5.5 ± 0.2 mm
- Distance from hole center to board edge (inner): 1.8 ± 0.1 mm
- Distance from hole center to board edge (outer): 2.0 ± 0.05 mm

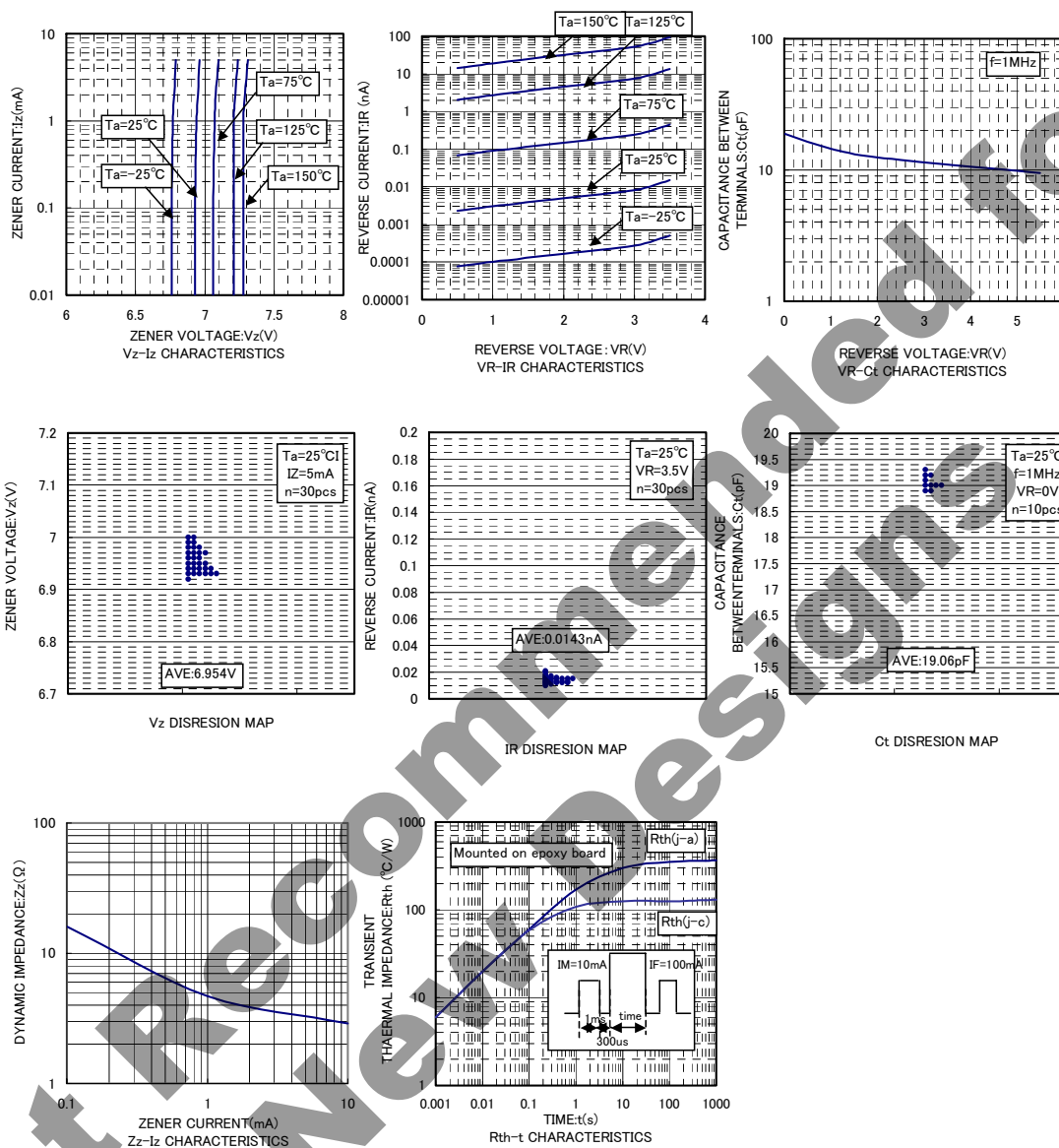
The side view shows the board thickness as 0.3 ± 0.1 mm and the mounting height as 2.4 ± 0.1 mm. The 3D perspective view shows the board with four holes and a central cutout.

Parameter	Symbol	Limits	Unit
Power dissipation (*1)	P	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	V_Z	6.47	-	7.14	V	$I_Z=5mA$
Reverse current	I_R	-	-	0.50	μA	$V_R=3.5V$
Operating resistance	Z_Z	-	-	40	Ω	$I_Z=5mA$

Diodes

●Electrical characteristic curves (Ta=25°C)



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(Note1) Medical Equipment Classification of the Specific Applications

JAPAN	USA	EU	CHINA
CLASS III	CLASS III	CLASS II b	CLASS III
CLASS IV		CLASS III	

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 - Use of our Products in places where the Products are exposed to static electricity or electromagnetic waves
 - Use of our Products in proximity to heat-producing components, plastic cords, or other flammable items
 - Sealing or coating our Products with resin or other coating materials
 - Use of our Products without cleaning residue of flux (even if you use no-clean type fluxes, cleaning residue of flux is recommended); or Washing our Products by using water or water-soluble cleaning agents for cleaning residue after soldering
 - Use of the Products in places subject to dew condensation
- The Products are not subject to radiation-proof design.
- Please verify and confirm characteristics of the final or mounted products in using the Products.
- In particular, if a transient load (a large amount of load applied in a short period of time, such as pulse. is applied, confirmation of performance characteristics after on-board mounting is strongly recommended. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
- De-rate Power Dissipation (Pd) depending on Ambient temperature (Ta). When used in sealed area, confirm the actual ambient temperature.
- Confirm that operation temperature is within the specified range described in the product specification.
- ROHM shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.

Precaution for Mounting / Circuit board design

- When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.
- In principle, the reflow soldering method must be used on a surface-mount products, the flow soldering method must be used on a through hole mount products. If the flow soldering method is preferred on a surface-mount products, please consult with the ROHM representative in advance.

For details, please refer to ROHM Mounting specification

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1. If change is made to the constant of an external circuit, please allow a sufficient margin considering variations of the characteristics of the Products and external components, including transient characteristics, as well as static characteristics.
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This Product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Please take proper caution in your manufacturing process and storage so that voltage exceeding the Products maximum rating will not be applied to Products. Please take special care under dry condition (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of ionizer, friction prevention and temperature / humidity control).

Precaution for Storage / Transportation

1. Product performance and soldered connections may deteriorate if the Products are stored in the places where:
 - [a] the Products are exposed to sea winds or corrosive gases, including Cl₂, H₂S, NH₃, SO₂, and NO₂
 - [b] the temperature or humidity exceeds those recommended by ROHM
 - [c] the Products are exposed to direct sunshine or condensation
 - [d] the Products are exposed to high Electrostatic
2. Even under ROHM recommended storage condition, solderability of products out of recommended storage time period may be degraded. It is strongly recommended to confirm solderability before using Products of which storage time is exceeding the recommended storage time period.
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4. Use Products within the specified time after opening a humidity barrier bag. Baking is required before using Products of which storage time is exceeding the recommended storage time period.

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QR code printed on ROHM Products label is for ROHM's internal use only.

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When disposing Products please dispose them properly using an authorized industry waste company.

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Not Recommended for
New Designs