

## DATASHEET

## TPM2872D Series: Silicon Schottky Diode

### Descriptions

DNmicron's TPM2872D series have good RF application performance. Its low barrier height, low forward voltage and low junction capacitance make TPM2872 a suitable choice for mixers and detectors with frequencies as high as 24 GHz.

### Features

- Low capacitance  $C=0.2 \text{ pF}$  @  $V_R=0V, f=1\text{MHz}$
- DFN1006 package (0.6mm\*1mm\*0.475mm)
- Pb-free

### Potential applications

For mixers and detectors in:

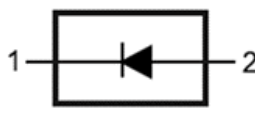
- Mobile devices
- Modules and embedded systems



ESD WARNING:

Handling Precautions Should Be Taken To Avoid Static Discharge.

### Part Number and Configuration

TPM2872D-16 DFN1006 Package
Marking: NN


$T_c = +25\text{ }^\circ\text{C}$ , unless otherwise specified

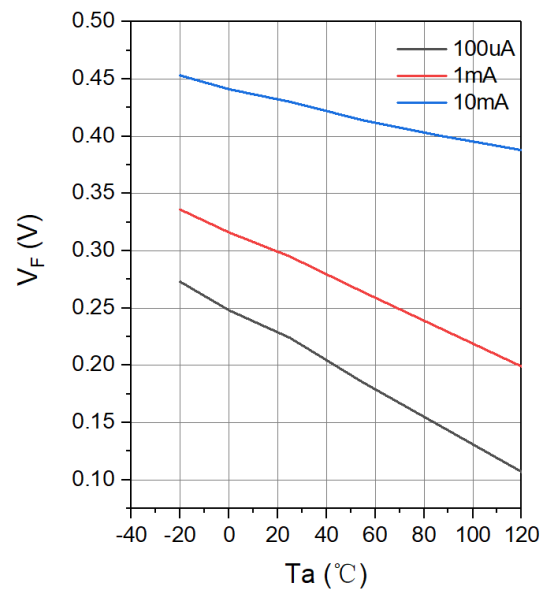
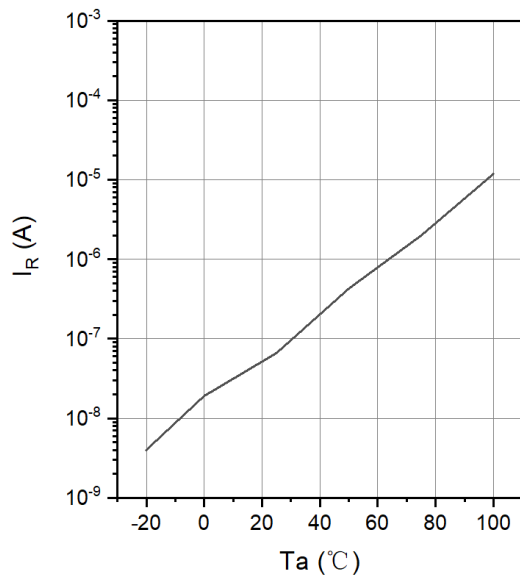
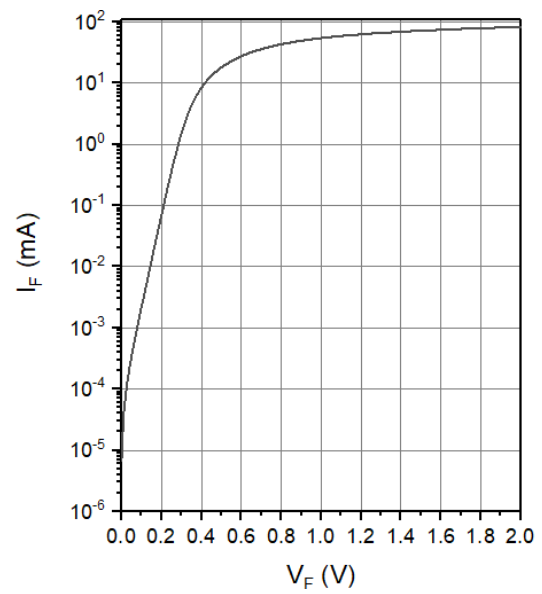
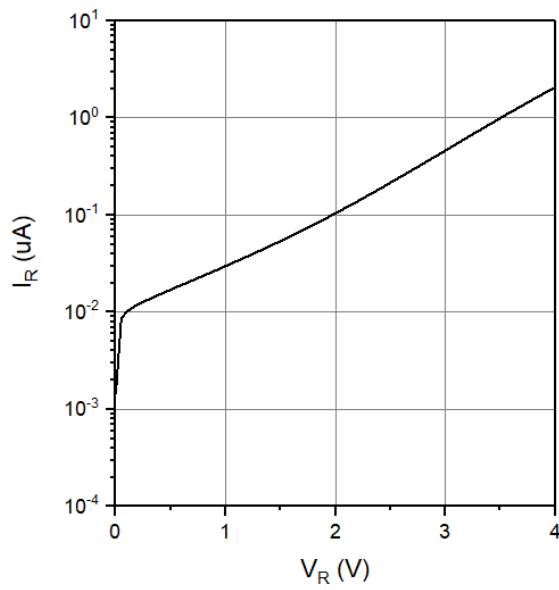
### Maximum Ratings

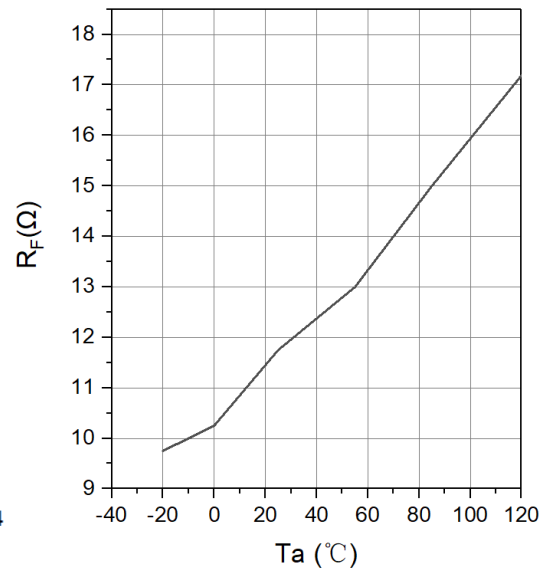
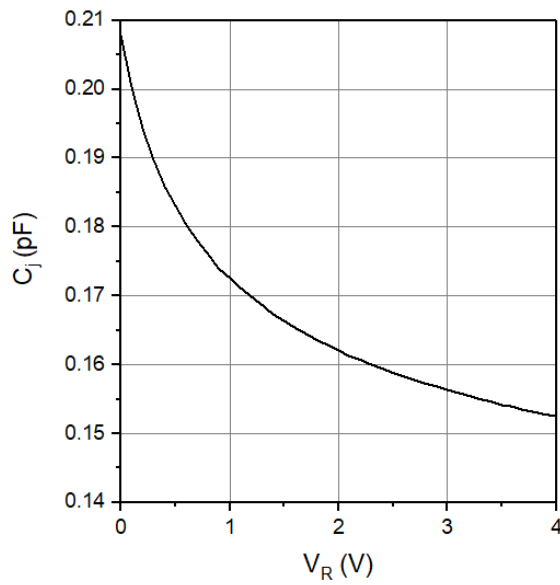
Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	4	V
Forward current	$I_F$	100	mA
Operating temperature	$T_{op}$	-55~150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55~150	$^\circ\text{C}$

### Electrical Characteristics

Parameter	Symbol	Values			Unit
		Min.	TYP.	Max.	
<b>DC Characteristics</b>					
Breakdown voltage $I_R=10\text{ }\mu\text{A}$ $I_R=100\text{ }\mu\text{A}$	$V_{(BR)}$	3.5 6	5 7.2	-	V
Reverse current $V_R=1\text{ V}$	$I_R$			1	$\mu\text{A}$
Forward voltage $I_F=1\text{ mA}$ $I_F=10\text{ mA}$	$V_F$	280 400	300 460	330 540	mV
Differential forward resistance $I_F=10\text{ mA} / 50\text{ mA}$	$R_F$	-	11.7		$\Omega$
<b>AC Characteristics</b>					
Diode capacitance $V_R=0, f=1\text{ MHz}$	$C_T$	-	0.208	-	pF

## Typical performance

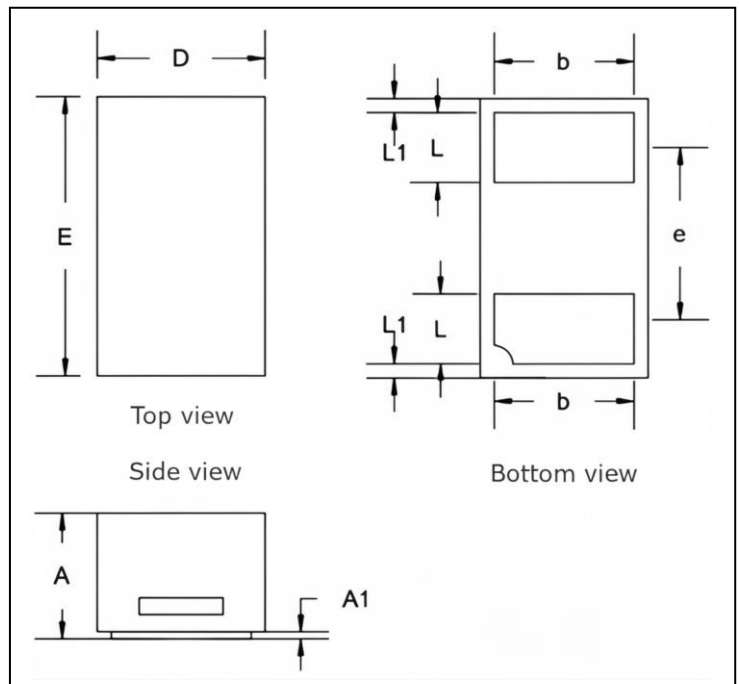




## Package Outline

### DFN1006

Symbol	Dimensions (mm)		
	Min	TYP	Max
A	0.440	0.475	0.500
A1	0.000	0.025	0.050
E	0.950	1.000	1.050
D	0.550	0.600	0.650
b	0.450	0.500	0.550
e		0.650BSC	
L	0.200	0.250	0.300
L1	0.050REF		



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## Disclaimer

### General Information

The information in this datasheet is provided for reference only and is subject to change without notice. While efforts have been made to ensure accuracy, DNMICRON, INC. makes no warranties regarding the completeness or correctness of the data. Users are advised to verify product suitability for their specific applications.

### Application Notes

The device's electrical characteristics and performance data are general guidelines. Any application-specific configurations must be independently verified. DNMICRON, INC. is not responsible for misuse or damage resulting from improper use or incorrect application.

### No Liability

DNMICRON, INC. is not liable for any direct, indirect, or consequential damages arising from the use of the product. The user assumes all risks associated with the device's use in their systems.

### Warranty

Products are covered by the standard warranty policy. For warranty terms and conditions, refer to the DNMICRON, INC. Warranty Policy.

### Compliance

Users are responsible for ensuring that their use of the product complies with all applicable laws and regulations. The product may comply with RoHS and REACH standards.

### Changes

DNMICRON, INC. reserves the right to update or discontinue the datasheet or product without notice. Updated information will be provided via the official website.

### Contact Information

For further information, please contact:

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