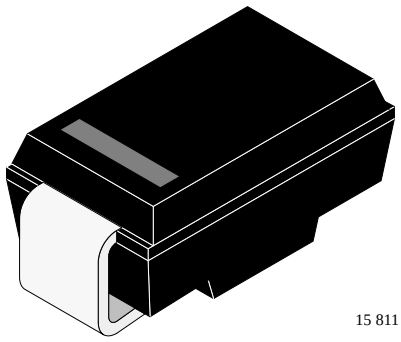
Schottky Barrier Rectifier

Features

- High efficiency
- Low power losses
- Very low switching losses
- Low reverse current
- High surge capability



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Applications

Polarity protection
Low voltage, high frequency rectifiers

Absolute Maximum Ratings

T_j = 25°C

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage= Repetitive peak reverse voltage			V_R= V_{RRM}	90	V
Peak forward surge current	t_p=10ms, half sinewave		I_{FSM}	30	A
Average forward current			I_{FAV}	1.5	A
Junction and storage temperature range			T_j=T_{stg}	–55...+150	°C

Maximum Thermal Resistance

T_j = 25°C

Parameter	Test Conditions	Symbol	Value	Unit
Junction lead	T_L=constant	R_{thJL}	25	K/W
Junction ambient	mounted on epoxy–glass hard tissue	R_{thJA}	150	
	mounted on epoxy–glass hard tissue, 50mm^2 35µm Cu		125	
	mounted on Al–oxid–ceramic (Al_2O_3), 50mm^2 35µm Cu		100	

Electrical Characteristics

T_j = 25°C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=1A		V_F			750	mV
Reverse current	V_R=V_{RRM}		I_R			100	µA
	V_R=V_{RRM}, T_j=100°C					1	mA

Characteristics (T_j = 25°C unless otherwise specified)

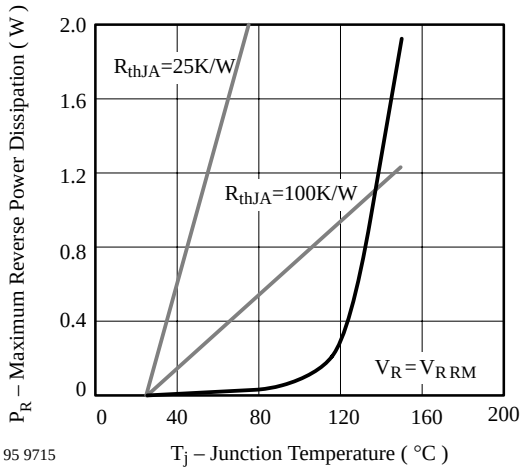


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

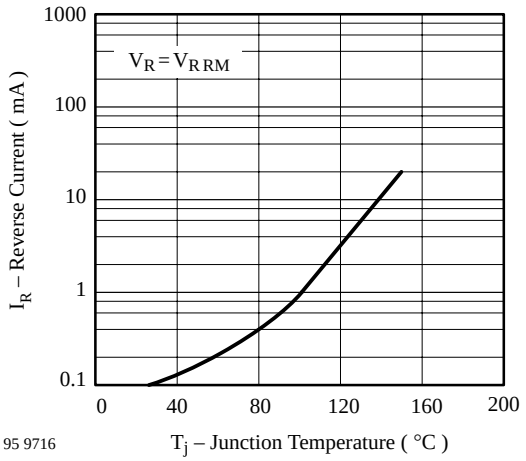


Figure 2. Max. Reverse Current vs. Junction Temperature

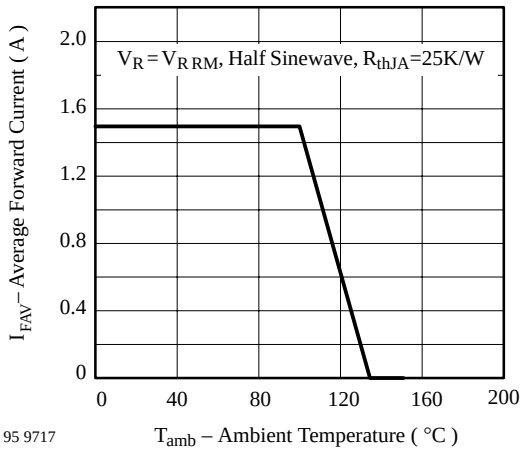


Figure 3. Max. Average Forward Current vs. Ambient Temperature

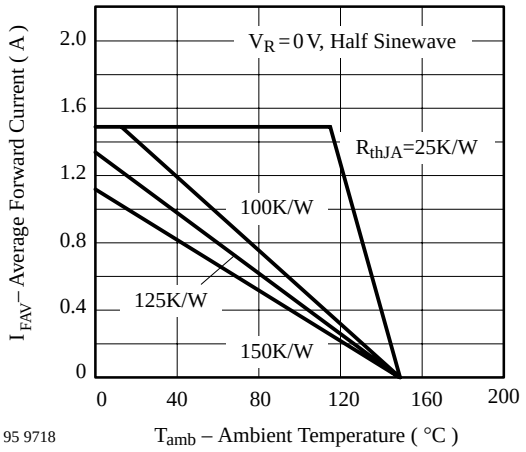


Figure 4. Max. Average Forward Current vs. Ambient Temperature

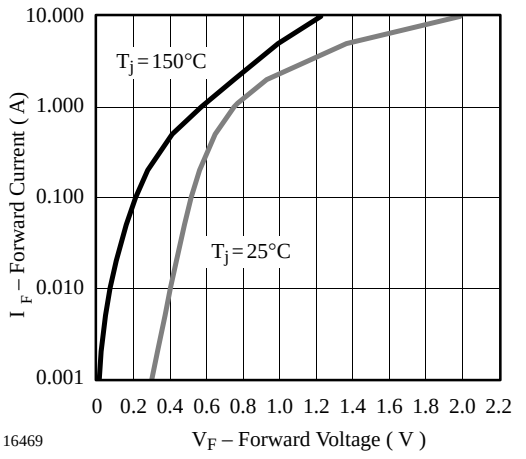


Figure 5. Forward Current vs. Forward Voltage

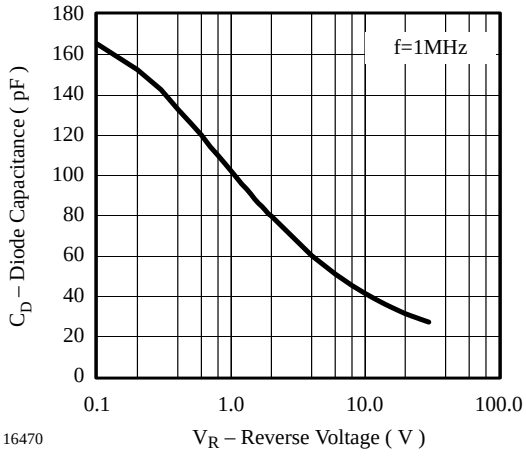
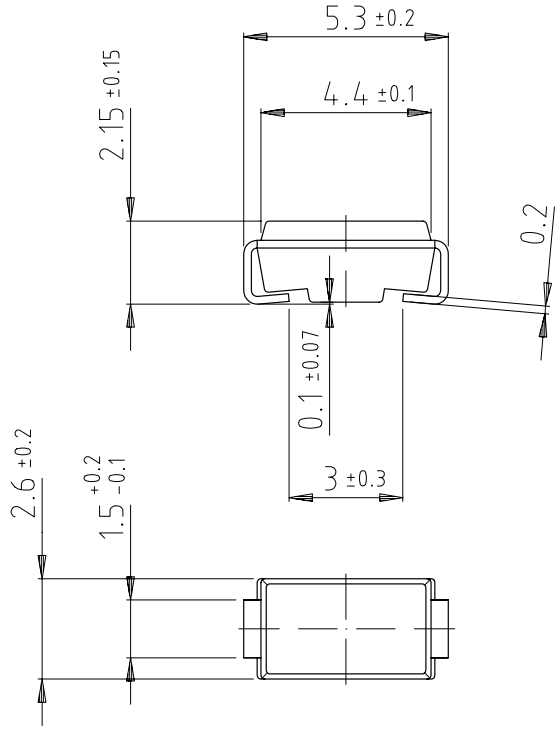
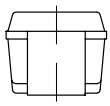


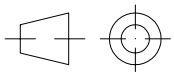
Figure 6. Diode Capacitance vs. Reverse Voltage

Dimensions in mm





Plastic case JEDEC DO 214
similar to SMA
Cathode indicated by a band



technical drawings
according to DIN
specifications

14275

Ozone Depleting Substances Policy Statement

It is the policy of **Vishay Semiconductor GmbH** to

1. Meet all present and future national and international statutory requirements.

2. Regularly and continuously improve the performance of our products, processes, distribution and operating systems with respect to their impact on the health and safety of our employees and the public, as well as their impact on the environment.

It is particular concern to control or eliminate releases of those substances into the atmosphere which are known as ozone depleting substances (ODSs).

The Montreal Protocol (1987) and its London Amendments (1990) intend to severely restrict the use of ODSs and forbid their use within the next ten years. Various national and international initiatives are pressing for an earlier ban on these substances.

Vishay Semiconductor GmbH has been able to use its policy of continuous improvements to eliminate the use of ODSs listed in the following documents.

1. Annex A, B and list of transitional substances of the Montreal Protocol and the London Amendments respectively

2. Class I and II ozone depleting substances in the Clean Air Act Amendments of 1990 by the Environmental Protection Agency (EPA) in the USA

3. Council Decision 88/540/EEC and 91/690/EEC Annex A, B and C (transitional substances) respectively.

Vishay Semiconductor GmbH can certify that our semiconductors are not manufactured with ozone depleting substances and do not contain such substances.

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