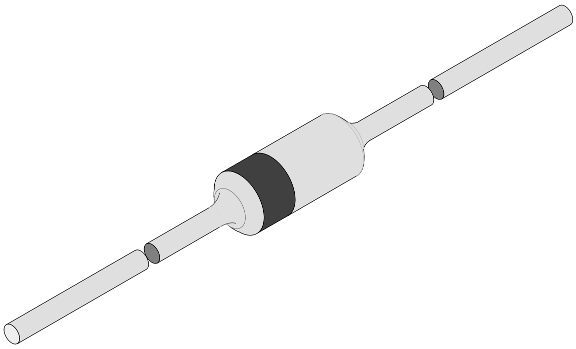
Schottky Barrier Diode

Features

- Integrated protection ring against static discharge
- Very low forward voltage



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Applications

Applications where a very low forward voltage is required

Absolute Maximum Ratings

T_j = 25°C

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage			V_R	30	V
Peak forward surge current	$t_p \leq 10$ ms		I_{FSM}	5	A
Repetitive peak forward current	$t_p \leq 1$s		I_{FRM}	300	mA
Forward current			I_F	200	mA
Average forward current	PCB mounting, l=4mm; V_{RWM}=25V, T_{amb}=50˚C		I_{FAV}	200	mA
Junction temperature			T_j	125	˚C
Storage temperature range			T_{stg}	–65...+150	˚C

Maximum Thermal Resistance

T_j = 25°C

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	l=4mm, T_L=constant	R_{thJA}	350	K/W

Electrical Characteristics

$T_j = 25°C$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=0.1mA		V_F			240	mV
	I_F=1mA		V_F			320	mV
	I_F=10mA		V_F			400	mV
	I_F=30mA		V_F			500	mV
	I_F=100mA		V_F			800	mV
Reverse current	V_R=25V		I_R			2	μA
Diode capacitance	V_R=1V, f=1MHz		C_D			10	pF

Characteristics ($T_j = 25°C$ unless otherwise specified)

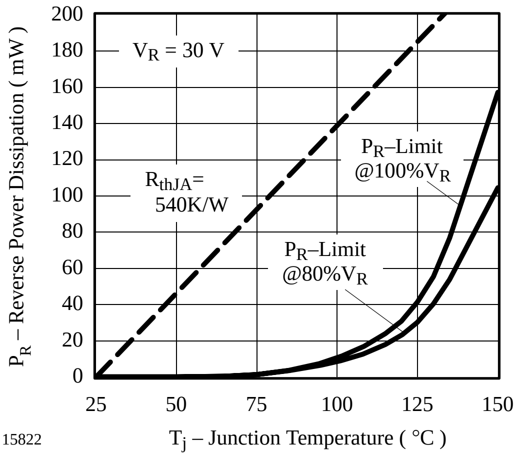


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

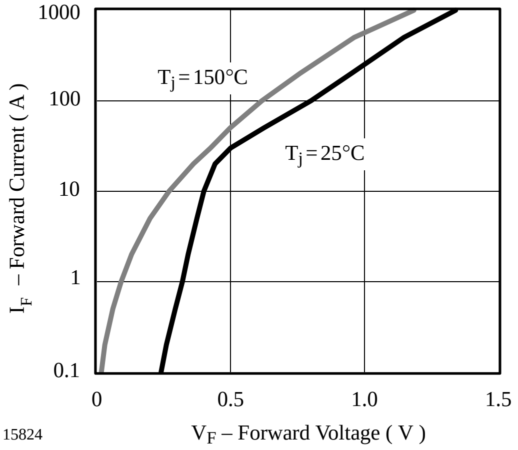


Figure 3. Forward Current vs. Forward Voltage

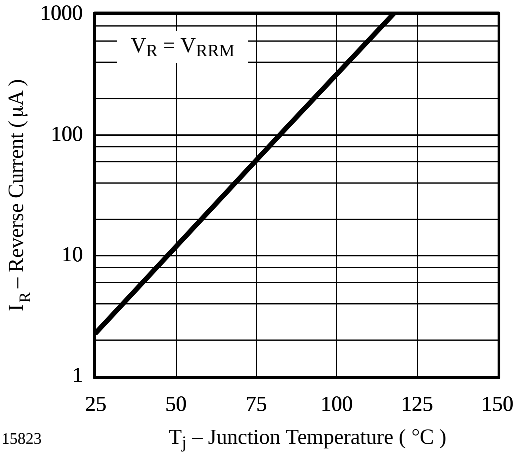


Figure 2. Reverse Current vs. Junction Temperature

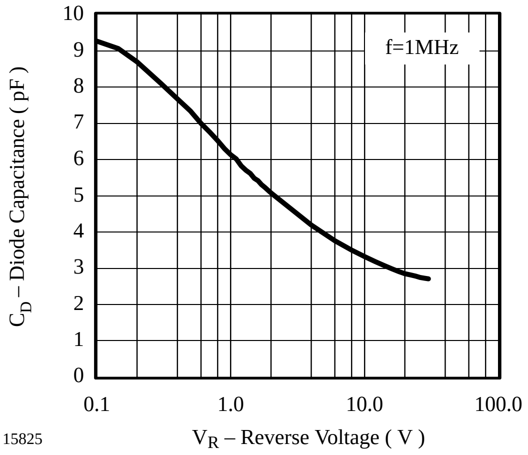
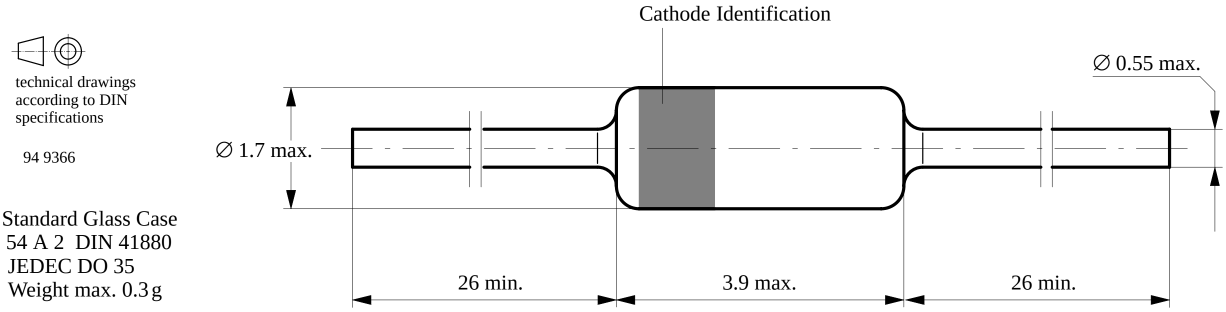


Figure 4. Diode Capacitance vs. Reverse Voltage

Dimensions in mm



Standard Glass Case
54 A 2 DIN 41880
JEDEC DO 35
Weight max. 0.3 g

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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