Thermal Characteristics

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambiant air		R_{thJA}	430[1)]	°C/W
Junction temperature		$T_j = T_{stg}$	- 65 to + 150	°C
Storage temperature range		T_S	- 65 to + 150	°C

[1)] Device on fiberglass substrate, see layout on next page.

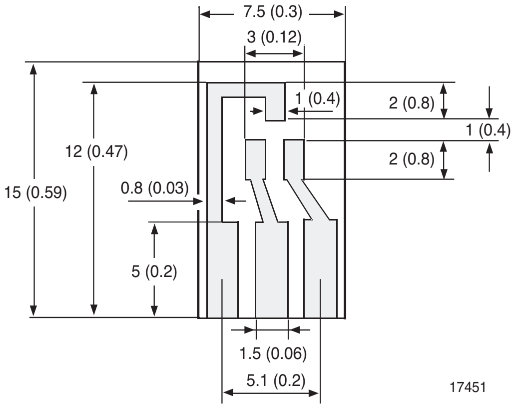
Electrical Characteristics

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown voltage	I_R = 100 µA pulses	$V_{(BR)}$	30			V
Leakage current	Pulse test t_p < 300 µs, δ < 2 % at V_R = 25 V	I_R			2	µA
Forward voltage	I_F = 0.1 mA, t_p < 300 µs, δ < 2 %	V_F			240	mV
	I_F = 1 mA, t_p < 300 µs, δ < 2 %	V_F			320	mV
	I_F = 10 mA, t_p < 300 µs, δ < 2 %	V_F			400	mV
	I_F = 30 mA, t_p < 300 µs, δ < 2 %	V_F			500	mV
	I_F = 100 mA, t_p < 300 µs, δ < 2 %	V_F			1000	mV
Diode capacitance	V_R = 1 V, f = 1 MHz	C_{tot}			10	pF
Reverse recovery time	I_F = 10 mA through I_R = 10 mA to I_{rr} = 1mA, R_L = 100 Ω	t_{rr}			5	ns

Layout for R_{thJA} test

Thickness:
Fiberglass 1.5 mm (0.059 in.)
Copper leads 0.3 mm (0.012 in.)



Typical Characteristics (T_{amb} = 25 °C unless otherwise specified)

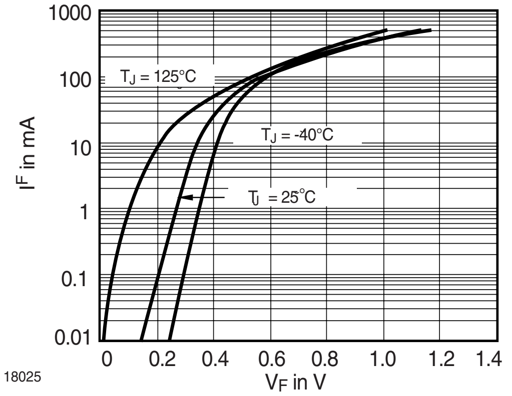


Figure 1. Typical Forward Voltage Forward Current at Various Temperatures

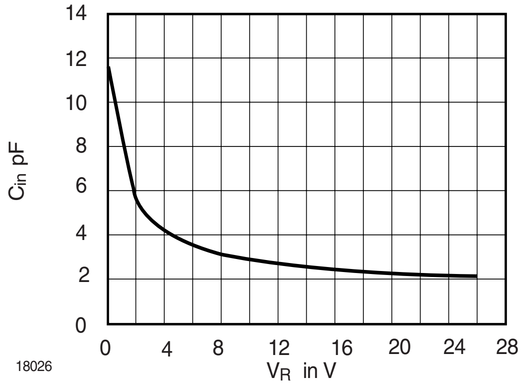


Figure 2. Typical Capacitance °C vs. Reverse Applied Voltage V_R

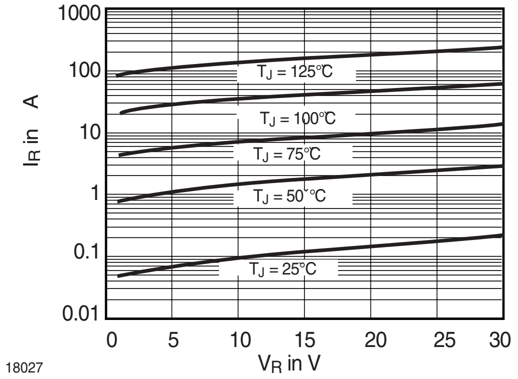
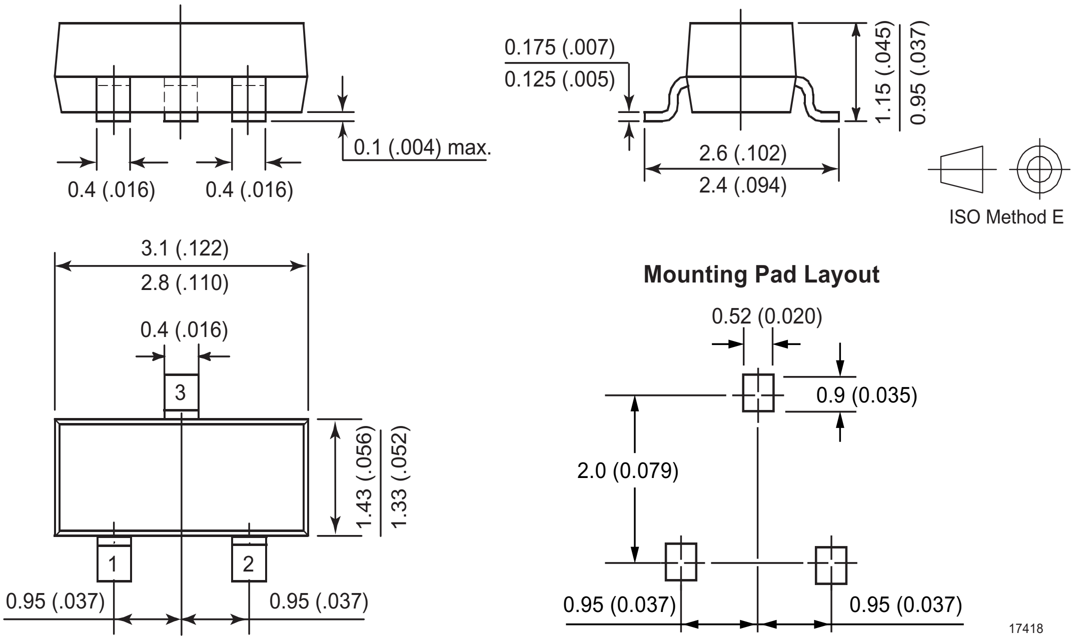


Figure 3. Typical Variation of Reverse Current at Various Temperatures

Package Dimensions in mm (Inches)



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 operatingsystems 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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