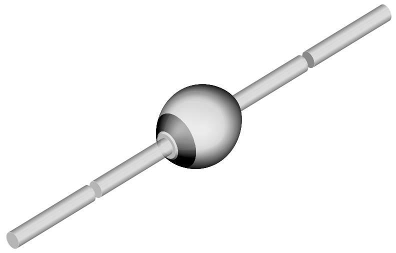
Dioda BYW34 TEMIC 2A 400V 200ns SOD57

Dane techniczne:
Nazwa: BYW34
Typ: dioda szybka
Napięcie wsteczne maksymalne: 400V
Napięcie przewodzenia maksymalne: 1,1V
Prąd przewodzenia: 2A
Prąd w impulsie maksymalny: 50A
Prąd upływu: 150µA
Czas gotowości: 200ns
Obudowa: SOD57
Montaż: przewlekany(THT)
Producent: TEMIC

Fast Avalanche Sinterglass Diode

Features

- Glass passivated junction
- Hermetically sealed package
- Low reverse current
- Soft recovery characteristics



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Applications

Fast rectification and switching diode for example for TV-line output circuits and switch mode power supply

Mechanical Data

Case: Sintered glass case, SOD 57

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 370 mg, (max. 500 mg)

Parts Table

Part	Type differentiation	Package
BYW32	V_R = 200 V; I_{FAV} = 2 A	SOD57
BYW33	V_R = 300 V; I_{FAV} = 2 A	SOD57
BYW34	V_R = 400 V; I_{FAV} = 2 A	SOD57
BYW35	V_R = 500 V; I_{FAV} = 2 A	SOD57
BYW36	V_R = 600 V; I_{FAV} = 2 A	SOD57

Absolute Maximum Ratings

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

Parameter	Test condition	Sub type	Symbol	Value	Unit
Reverse voltage = Repetitive peak reverse voltage	see electrical characteristics	BYW32	$V_R = V_{RRM}$	200	V
	see electrical characteristics	BYW33	$V_R = V_{RRM}$	300	V
	see electrical characteristics	BYW34	$V_R = V_{RRM}$	400	V
	see electrical characteristics	BYW35	$V_R = V_{RRM}$	500	V
	see electrical characteristics	BYW36	$V_R = V_{RRM}$	600	V
Peak forward surge current	t_p = 10 ms, half sinewave		I_{FSM}	50	A
Repetitive peak forward current			I_{FRM}	12	A
Average forward current	φ = 180 °		I_{FAV}	2	A
Junction and storage temperature range			$T_j = T_{stg}$	- 55 to + 175	°C
Non repetitive reverse avalanche energy	$I_{(BR)R}$ = 0.4 A		E_R	10	mJ

Maximum Thermal Resistance

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

Parameter	Test condition	Sub type	Symbol	Value	Unit
Junction ambient	l = 10 mm, T_L = constant		R_{thJA}	45	K/W
	on PC board with spacing 25 mm		R_{thJA}	100	K/W

Electrical Characteristics

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

Parameter	Test condition	Sub type	Symbol	Min	Typ.	Max	Unit
Forward voltage	I_F = 1 A		V_F		0.95	1.1	V
Reverse current	$V_R = V_{RRM}$		I_R		1	5	µA
	$V_R = V_{RRM}$, T_j = 150 °C		I_R		60	150	µA
Reverse recovery time	I_F = 0.5 A, I_R = 1 A, i_R = 0.25 A		t_{rr}			200	ns

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

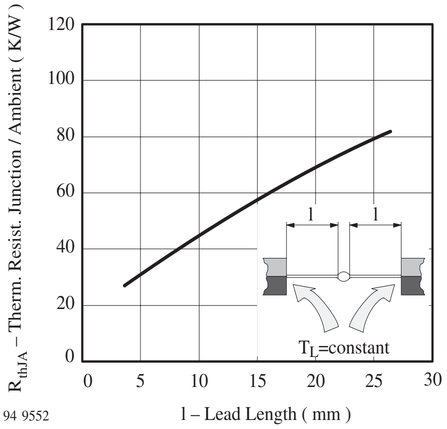


Figure 1. Max. Thermal Resistance vs. Lead Length

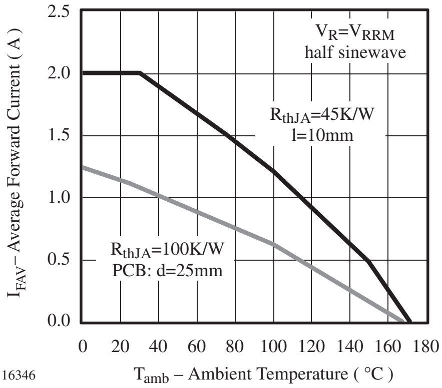


Figure 3. Max. Average Forward Current vs. Ambient Temperature

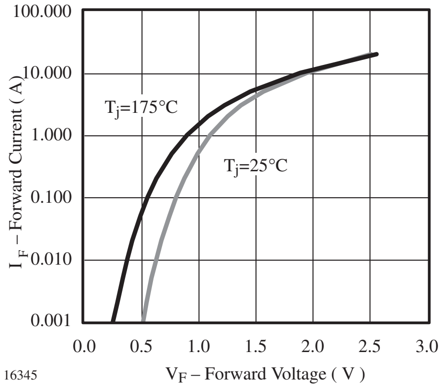


Figure 2. Forward Current vs. Forward Voltage

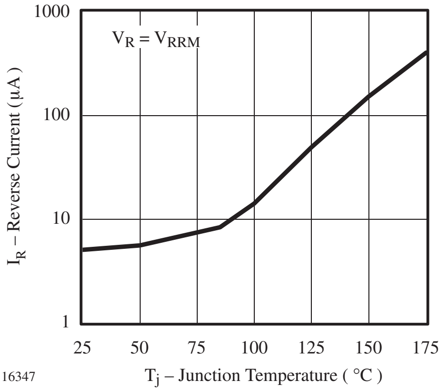


Figure 4. Reverse Current vs. Junction Temperature

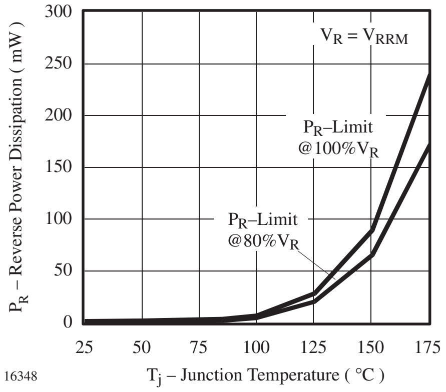


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

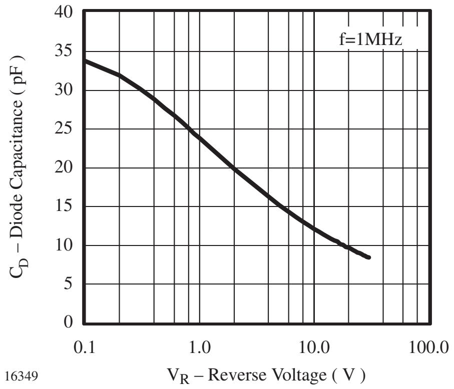


Figure 6. Diode Capacitance vs. Reverse Voltage

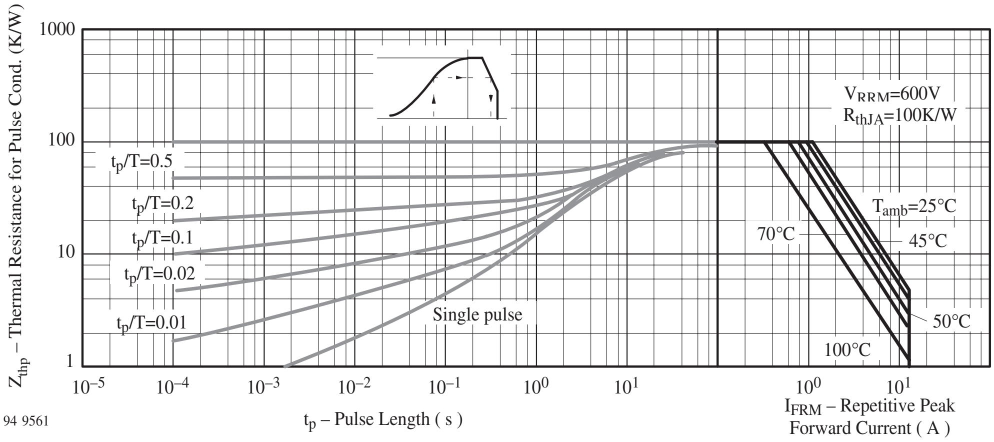
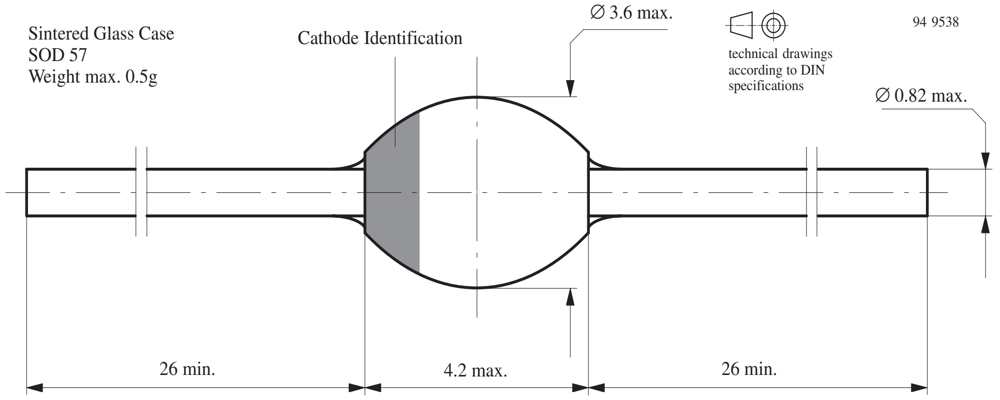


Figure 7. Thermal Response

Package Dimensions in mm



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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