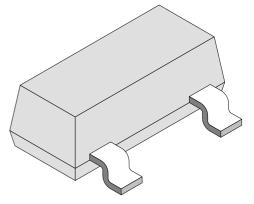




Silicon Epitaxial Planar Diode

Features

- Ultra fast switching speed
- Surface mount package ideally suited for automatic insertion
- High conductance



94 8550

Absolute Maximum Ratings

 $T_i = 25^{\circ}C$

Parameter	Test Conditions	Symbol	Value	Unit
Non repetitive peak reverse voltage		V_{RM}	100	V
Repetitive peak reverse voltage =Working peak reverse voltage =DC Blocking voltage		V _{RRM} =V _{RWM} =V _R	75	<
Peak forward surge current	t _p =1s	I _{FSM}	1	Α
	t _p =1μs	I_{FSM}	2	Α
Average forward current	half wave rectification with resistive load and f ≥ 50 MHz, on ceramic substrate 8mmx10mmx0.7mm	I _{FAV}	150	mA
Forward current	on ceramic substrate 8mmx10mmx0.7mm	I _F	300	mA
Power dissipation	on ceramic substrate 8mmx10mmx0.7mm	P _{tot}	350	mW
Junction and storage temperature range		T _j =T _{stg}	<i>−</i> 55+150	Ĵ

Maximum Thermal Resistance

 $T_i = 25^{\circ}C$

Parameter	Test Conditions	Symbol	Value	Unit	
Junction ambient	on ceramic substrate	R_{thJA}	357	K/W	
	8mmx10mmx0.7mm				

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Electrical Characteristics

 $T_j = 25^{\circ}C$

Parameter	Test Conditions	Symbol	Min	Тур	Max	Unit
Forward voltage	I _F =1mA	V_{F}			715	mV
	I _F =10mA	V_{F}			855	mV
	I _F =50mA	V _F			1	V
	I _F =150mA	V_{F}			1.25	V
Reverse current	V _R =75V	I _R			1	μΑ
	V _R =75V, T _j =150°C	I _R			50	μΑ
	V _R =25V, T _i =150°C	I _R			30	μΑ
Diode capacitance	V _R =0, f=1MHz	C _D			4	pF
Reverse recovery time	I_F =10mA to I_R =1mA, V_R =6V, R_L =100 Ω	t _{rr}			6	ns

Characteristics $(T_j = 25^{\circ}C \text{ unless otherwise specified})$

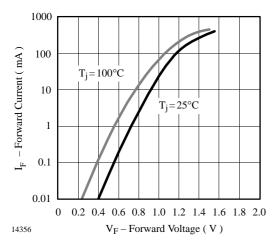


Figure 1. Forward Current vs. Forward Voltage

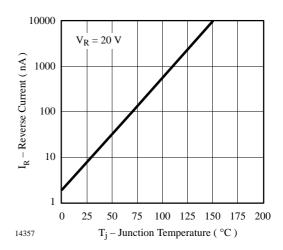
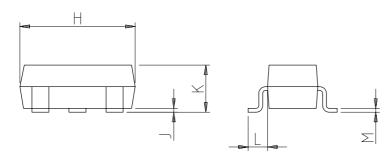


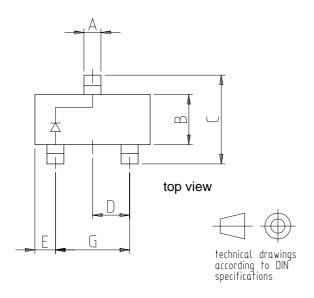
Figure 2. Reverse Current vs. Junction Temperature



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Dimensions in mm





SOT-23			
Dim	Min	Max	
А	0.37	0.50	
В	1.19	1.40	
	2.10	2.50	
D	0.89	1.05	
E	0.45	0.61	
G	1.78	2.05	
Н	2.79	3.05	
J	0.013	0.15	
K	0.89	1.10	
L	0.45	0.61	
М	0.076	0.130	
Al	l Dimensior	ıs in mm	

14370

Case: SOT23, plastic Terminals: Solderable per MIL-STD-202, Method 208

Polarity: cathode band

Marking: KA6

Approx. weight: SOT23 0.008 grams

BAS16

Vishay Telefunken



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.

We reserve the right to make changes to improve technical design and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer. Should the buyer use Vishay-Telefunken products for any unintended or unauthorized application, the buyer shall indemnify Vishay-Telefunken against all claims, costs, damages, and expenses, arising out of, directly or indirectly, any claim of personal damage, injury or death associated with such unintended or unauthorized use.

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