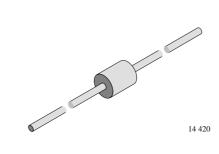


Vishay Lite-On Power Semiconductor

1.0A Glass Passivated Rectifier

Features

- Glass passivated die construction
- Diffused junction
- High current capability and low forward voltage drop
- Surge overload rating to 30A peak
- Plastic material UL Recognition flammability classification 94V–0



Symbol

V_{RRM}

 $=V_{RWM}$

=V_R

I_{FSM}

IFAV

T_i=T_{sta}

Value

50

100

200

400

800

1000

30

1

-65...+150

Unit

V

V

V V

V

V

V

А

A

°C

Absolute Maximum Ratings

$T_j = 25^{\circ}C$		
Parameter	Test Conditions	Туре
Repetitive peak reverse voltage		D1G
=Working peak reverse voltage		D2G
=DC Blocking voltage		D3G
		D4G
		D5G
		D6G
		D7G
Peak forward surge current		
Average forward current	T _A =75°C	

Electrical Characteristics

Junction and storage temperature range

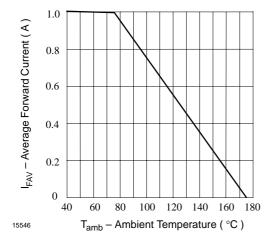
T_i = 25°C

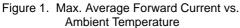
Parameter	Test Conditions	Туре	Symbol	Min	Тур	Max	Unit
Forward voltage	I _F =1A		V _F			1	V
Reverse current	T _A =25°C		I _R			5	μΑ
	T _A =100°C		I _R			50	μΑ
Reverse recovery time	I _F =0.5A, I _R =1A, I _{rr} =0.25A		t _{rr}			2	μs
Diode capacitance	V _R =4V, f=1MHz		CD		8		pF
Thermal resistance junction to ambient			R _{thJA}		100		K/W

D1G–D7G Vishay Lite–On Power Semiconductor



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





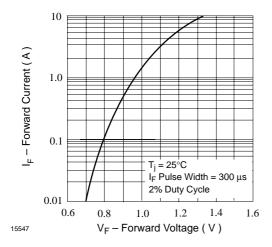


Figure 2. Typ. Forward Current vs. Forward Voltage

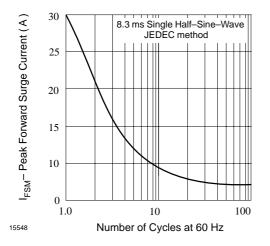


Figure 3. Max. Peak Forward Surge Current vs. Number of Cycles

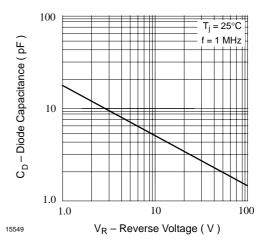


Figure 4. Typ. Diode Capacitance vs. Reverse Voltage

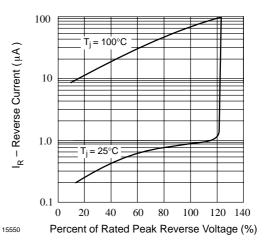
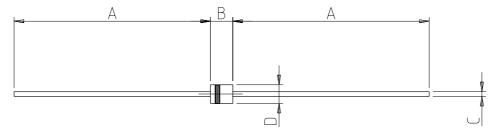


Figure 5. Typ. Reverse Current vs. Percent of Rated Peak Reverse Voltage

VISHAY

Vishay Lite-On Power Semiconductor

Dimensions in mm



Τ-1				
Dim	Min	Max		
А	25.40	-		
В	2.60	3.20		
C	0.53	0.64		
D	2.20	2.60		
All Dimensions in mm				



14449

Case: molded plastic Polarity: cathode band Approx. weight: 0.13 grams Mounting position: any Marking: type number

D1G–D7G Vishay Lite–On Power Semiconductor



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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