



# 1200 V SCR Portfolio Expansion With New 80 A and 100 Devices in TO-247 Long Lead Package

Vishay's 1200 V SCRs are now available with high current ratings of 80 A and 100 A in the TO-247 long lead package. Compared to competing devices on the market, the VS-80TPS12L and VS-100TPS12L are highly competitive in terms of efficiency and conduction losses.

| Vishay Part Number              | DRW                                                                                                    |
|---------------------------------|--------------------------------------------------------------------------------------------------------|
| <a href="#">VS-80TPS12L-M3</a>  |  <p>TO-247AD 3L</p> |
| <a href="#">VS-80TPS12LHM3</a>  |                                                                                                        |
| <a href="#">VS-100TPS12L-M3</a> |                                                                                                        |
| <a href="#">VS-100TPS12LHM3</a> |                                                                                                        |

## Device Specification Table

| Vishay Part Number              | Package     | Type       | $V_{DRM}/V_{RRM}$ (V) | $I_T(AV)$ |                    | $V_{TM}$ (V) | $I_{TSM}^{(1)}$ (A) | $dV/dt$ (V/ $\mu$ s) | $dI/dt$ (A/ $\mu$ s) |
|---------------------------------|-------------|------------|-----------------------|-----------|--------------------|--------------|---------------------|----------------------|----------------------|
|                                 |             |            |                       | (A)       | at $T_{case}$ (°C) |              |                     |                      |                      |
| <a href="#">VS-80TPS12L-M3</a>  | TO-247AD 3L | Industrial | 1200                  | 80        | 103                | 1.18         | 760                 | 1000                 | 500 <sup>(2)</sup>   |
| <a href="#">VS-80TPS12LHM3</a>  | TO-247AD 3L | Automotive | 1200                  | 80        | 103                | 1.18         | 760                 | 1000                 | 500 <sup>(2)</sup>   |
| <a href="#">VS-100TPS12L-M3</a> | TO-247AD 3L | Industrial | 1200                  | 100       | 103                | 1.17         | 935                 | 1000                 | 500 <sup>(3)</sup>   |
| <a href="#">VS-100TPS12LHM3</a> | TO-247AD 3L | Automotive | 1200                  | 100       | 103                | 1.17         | 935                 | 1000                 | 500 <sup>(3)</sup>   |

### Notes

- <sup>(1)</sup> 10 ms sine pulse, no voltage reapplied
- <sup>(2)</sup>  $T_J = 150\text{ }^{\circ}\text{C}$ ,  $V_R < 1000\text{ V}$ ,  $I_T = 80\text{ A}$ ,  $I_{GT} = 200\text{ mA}$ ,  $V_{GT} = 2.5\text{ V}$ ,  $t_r < 100\text{ ns}$ , non-repetitive
- <sup>(3)</sup>  $T_J = 150\text{ }^{\circ}\text{C}$ ,  $V_R < 1000\text{ V}$ ,  $I_T = 100\text{ A}$ ,  $I_{GT} = 200\text{ mA}$ ,  $t_r < 100\text{ ns}$ , non-repetitive



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## APPLICATIONS

- Input rectification crowbars (soft start), AC switch motor controls, UPS, welding, and battery chargers

## DESCRIPTION

- The VS-80TPS12L and VS-100TPS12L high voltage series of silicon controlled rectifiers are specifically designed for medium power switching and phase control applications
- The glass passivation technology used offers reliable operation up to 150 °C

## SAMPLES

- Samples are available upon request by means of Vishay's website

For further information, please contact your regional Vishay office.

### Contact Information

#### The Americas

Vishay Semiconductors  
150 Motor Parkway,  
Suite 119  
Hauppauge NY 11788 USA  
Phone: +1 631 300 3816  
Fax: +1 631 300 3843

[Diodes-Americas@vishay.com](mailto:Diodes-Americas@vishay.com)

#### Europe

Vishay Semiconductors  
Theresienstrasse 2  
D-74072 Heilbronn, Germany  
Phone: +49 7131 7498 656 (or  
715)  
Fax: +49 7131 67 2938

[Diodes-Europe@vishay.com](mailto:Diodes-Europe@vishay.com)

#### Asia / Pacific

Vishay Semiconductors  
15D, Sun Tong Infoport Plaza  
55 Huai Hai West Road  
Shanghai, China 200030  
Phone: +86 138 1787 2112  
Fax: +86 21 5258 7979

[Diodes-Asia@vishay.com](mailto:Diodes-Asia@vishay.com)