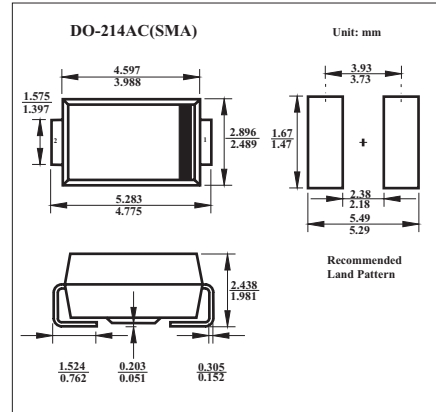


**KS12 - KS100  
(SS12 - SS100)**

■ **Features**

- Glass passivated junctions.
- High current capability, low  $V_F$ .
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.



■ **Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$  unless otherwise noted**

| Parameter   | Symbol          | KS12        | KS13 | KS14 | KS15 | KS16 | KS18 | KS19 | KS100 | Unit               |
|---|-----------------|-------------|------|------|------|------|------|------|-------|--------------------|
| Maximum Repetitive Reverse Voltage  | $V_{RRM}$       | 20          | 30   | 40   | 50   | 60   | 80   | 90   | 100   | V                  |
| Average Rectified Forward Current<br>.375" lead length @ $T_A = 75^\circ\text{C}$ | $I_{F(AV)}$     | 1.0         |      |      |      |      |      |      |       | A                  |
| Non-repetitive Peak Forward Surge Current<br>8.3 ms Single Half-Sine-Wave         | $I_{FSM}$       | 40          |      |      |      |      |      |      |       | A                  |
| Storage Temperature Range   | $T_{stg}$       | -65 to +150 |      |      |      |      |      |      |       | $^\circ\text{C}$   |
| Operating Junction Temperature  | $T_J$           | -65 to +125 |      |      |      |      |      |      |       | $^\circ\text{C}$   |
| Power Dissipation   | $P_D$           | 1.1         |      |      |      |      |      |      |       | W                  |
| Thermal Resistance, Junction to Ambient *   | $R_{\theta JA}$ | 88          |      |      |      |      |      |      |       | $^\circ\text{C/W}$ |

\*Device mounted on FR-4 PCB 0.013 mm.

■ **Electrical Characteristics  $T_a = 25^\circ\text{C}$  unless otherwise noted**

| Parameter  | Symbol | KS12 | KS13 | KS14 | KS15 | KS16 | KS18 | KS19 | KS100 | Units |    |
|--|--------|------|------|------|------|------|------|------|-------|-------|----|
| Forward Voltage @ 1.0 A                                | $V_F$  | 500  |      |      | 700  |      | 850  |      |       | mV    |    |
| Reverse Current @ rated $V_R$ $T_A = 25^\circ\text{C}$ | $I_R$  | 0.2  |      |      |      |      |      |      |       |       | mA |
| $T_A = 100^\circ\text{C}$                              |        | 10   |      |      |      |      |      |      |       |       | mA |