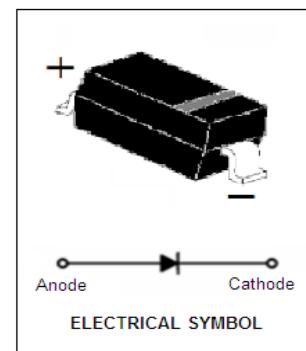




SLS SEMICONDUCTOR (SHENZHEN) CO.,LTD.

SOD-123 封装二极管/SOD-123 Plastic-Encapsulate Diodes**B0520LW/B0530W/B0540W (SCHOTTKY DIODES)****特点/Features :**

- Low Forward Voltage Drop ;
- Guard Ring Construction for Transient Protection ;
- High Conductance ;
- Also Available in Lead Free Version ;

**极限参数/Absolute maximum ratings(Ta=25°C)**

| Parameter                              | Symbol          | B0520LW | B0530W  | B0540W | Unit  |
|--|-----------------|---------|---------|--------|-------|
| Peak Repetitive Reverse Voltage        | $V_{RRM}$       |         |         |        |       |
| Working Peak Reverse Voltage           | $V_{RWM}$       | 20      | 30      | 40     | V     |
| DC Blocking Voltage                    | $V_R$           |         |         |        |       |
| RMS Reverse Voltage                    | $V_{R(RMS)}$    | 14      | 20      | 28     | V     |
| Average Rectified Output Current       | $I_o$           |         | 500     |        | mA    |
| Forward Surge Current Peak             | $I_{FSM}$       |         | 5.5     |        | A     |
| Power Dissipation                      | $P_d$           |         | 500     |        | mW    |
| Thermal Resistance Junction To Ambient | $R_{\theta JA}$ |         | 200     |        | °C/mW |
| Junction Temperature                   | $T_j$           |         | 125     |        | °C    |
| Storage Temperature                    | $T_{stg}$       |         | -55~150 |        | °C    |
| Voltage rate of Change                 | $dv/dt$         |         | 1000    |        | V/μS  |

**电性能参数/Electrical characteristics (Ta=25°C)**

| 参数/Parameter                      | 符号          | 测试条件               | B0520LW | B0530W | B0540W | 单位 |
|-----------------------------------|-------------|--------------------|---------|--------|--------|----|
| Minimum Reverse Breakdown Voltage | $V_{(BR)R}$ | $I_R=250 \mu A$    | 20      |        |        | V  |
|                                   |             | $I_R=200 \mu A$    |         | 30     |        |    |
|                                   |             | $I_R=20 \mu A$     |         |        | 40     |    |
| Forward Voltage                   | $V_{F1}$    | $I_F=0.1A$         | 0.32    | 0.375  | --     | V  |
|                                   | $V_{F2}$    | $I_F=0.5A$         | 0.385   | 0.43   | 0.51   | V  |
|                                   | $V_{F3}$    | $I_F=1A$           | --      | --     | 0.62   | V  |
| Reverse Current                   | $I_{R1}$    | $V_R=10V$          | 75      | --     | --     | μA |
|                                   | $I_{R2}$    | $V_R=15V$          | --      | 20     | --     |    |
| Reverse Current                   | $I_{R3}$    | $V_R=20V$          | 250     | --     | 10     | μA |
|                                   | $I_{R4}$    | $V_R=30V$          | --      | 130    | --     |    |
|                                   | $I_{R5}$    | $V_R=40V$          | --      | --     | 20     |    |
| Capacitance Between Terminals     | $C_T$       | $V_R=0V, f=1.0MHz$ |         |        | 170    | pF |

**印章/ Marking:**

| 型号 | B0520LW | B0530W | B0540W |
|----|---------|--------|--------|
| 印章 | SD      | SE     | SF     |



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## 典型特性曲线图/Typical Characteristics

