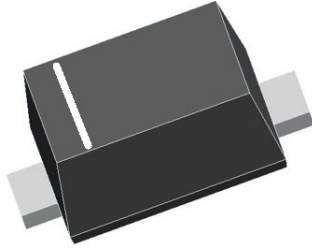


SOD-523



MARKING: 4A

特征 Features

- Very Small SMD Package
- Low Forward Voltage Drop
- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

机械数据 Mechanical Data

- SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

极限值和温度特性(TA = 25°C 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

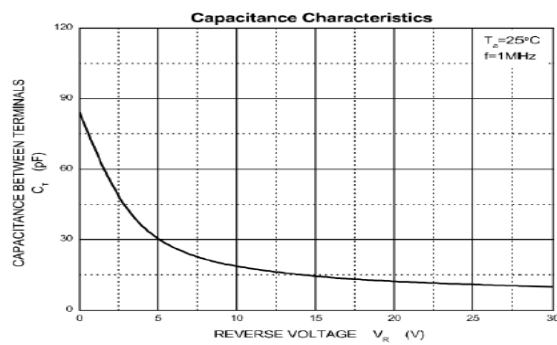
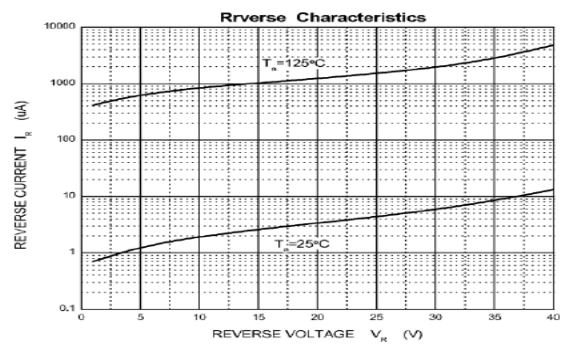
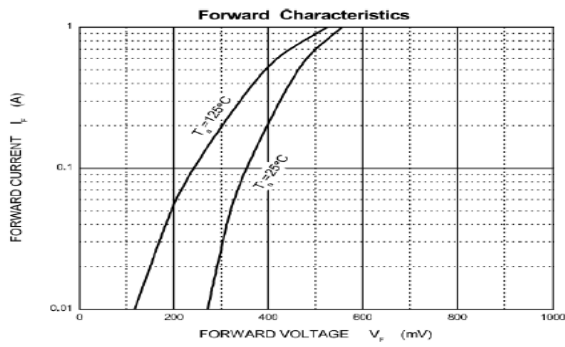
| 参数 Parameters | 符号 Symbol | 界限 Limit | 单位 Unit |
|---|--------------|-------------|------------|
| DC reverse voltage | VR | 40 | V |
| Mean rectifying current | IO | 1 | A |
| Non-repetitive Peak Forward Surge Current @ t=8.3ms | IFSM | 7 | A |
| Typical thermal resistance* | RθJA | 250 | °C/W |
| Power Dissipation | PD | 500 | mW |
| Junction Temperature | TJ | -40 ~ +125 | °C |
| Storage temperature range | TSTG | -55 ~ +150 | °C |

电特性 (TA = 25°C 除非另有规定)

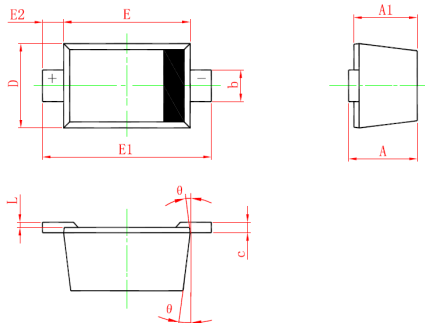
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

| 参数 Parameters | 符号 Symbol | 测试条件 Test conditions | Min | Typ | Max | 单位 Unit |
|---------------------------------|--------------|-------------------------|-----|------|------|------------|
| Forward voltage | VF1 | IF = 0.1A | | 0.35 | 0.38 | V |
| | VF2 | IF = 0.2A | | 0.37 | 0.40 | |
| | VF3 | IF = 0.5A | | 0.42 | 0.49 | |
| | VF4 | IF = 0.7A | | 0.47 | 0.55 | |
| | VF5 | IF = 1A | | 0.51 | 0.61 | |
| Reverse breakdown voltage | VBR | IR = 1mA | 40 | | | V |
| Reverse voltage leakage current | IR | VR = 40V | | 10 | 40 | uA |
| Total capacitance | Ctot | VR = 10V, f = 1MHz | | 19 | | pF |

Typical Characteristics

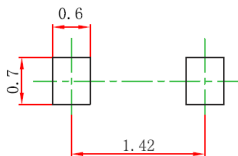


SOD-523 PACKAGE OUTLINE Plastic surface mounted package



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|----------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.510 | 0.770 | 0.020 | 0.031 |
| A1 | 0.500 | 0.700 | 0.020 | 0.028 |
| b | 0.250 | 0.380 | 0.010 | 0.015 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 0.750 | 0.850 | 0.030 | 0.033 |
| E | 1.100 | 1.300 | 0.043 | 0.051 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E2 | 0.200 REF | | 0.008 REF | |
| L | 0.010 | 0.070 | 0.001 | 0.003 |
| θ | 7° REF | | 7° REF | |

SOD - 523 Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

NOTICE

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