



K12 THRU K110

Surface Mount Schottky Rectifier

表面安装肖特基整流管

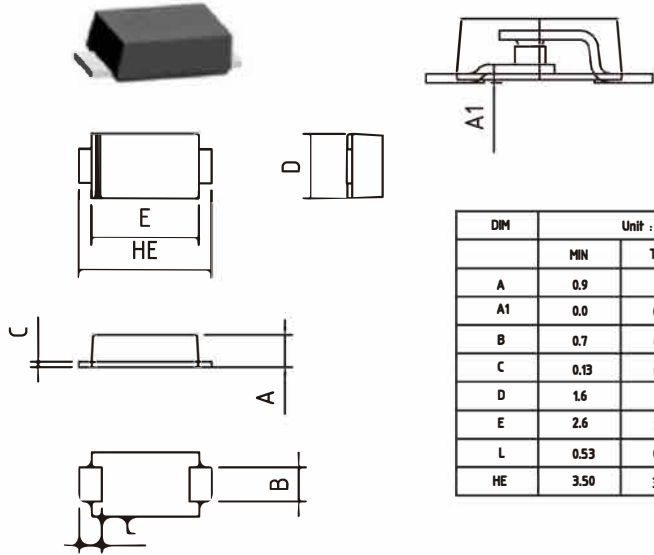
特性 Features

- 超薄的封装
Low-profile package
- 适合于自动化放置
Ideal for automated placement
- 超速的反向恢复时间
Ultrafast reverse recovery time
- 低损耗效率高
Low power loss, high efficiency
- 低正向电压降
Low forward voltage drop
- 高过载能力
High surge capability
- 高温焊接 终端260 C /10秒
High temperature soldering 260 C /10seconds at terminals

机械数据 Mechanical Data

- 符合JEDEC SOD123FL的塑封本体和钝化芯片的封装
Case: JEDEC SOD-123FL molded Plastic body over passivated chip
- 终端: 镀锡焊符合 J-STD-002B and JESD22-B102D
Terminals: solder plated solderable per J-STD-002B and JESD22-B102D
- 极性: 激光带标记端为负极
Polarity: Laser band denotes cathode end

外型尺寸和标记 Outline Dimensions and Mark



| DIM | Unit : mm | | |
|-----|-----------|------|------|
| | MIN | TYP | MAX |
| A | 0.9 | 1.05 | 1.30 |
| A1 | 0.0 | 0.03 | 0.1 |
| B | 0.7 | 0.80 | 1.0 |
| C | 0.13 | 0.15 | 0.2 |
| D | 1.6 | 1.8 | 2.0 |
| E | 2.6 | 2.8 | 3.0 |
| L | 0.53 | 0.63 | 0.73 |
| HE | 3.50 | 3.70 | 3.90 |

最大额定参数及热特性和电特性 Maximum Ratings & Thermal Characteristics and Electrical Characteristics

在25 环境温度下评级, 除非另有说明。 Rating at 25 ambient temperature unless otherwise specified

| 型号 Type Number | 符号 Symbol | K12 | K13 | K14 | K15 | K16 | K18 | K110 | 单位 Units |
|---|-------------|-------------|-----|------|-----|------|-----|------|-------------|
| 最大重复峰值反向电压 Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| 最大电压有效值 Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| 最大直流阻断电压 Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| 最大平均整流输出电流 Maximum Average Forward Rectified 在 @ $T_1=110^{\circ}C$ 的条件下 Current @ $T_1=110^{\circ}C$ | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| 峰值正向冲击电流8.3毫秒 Peak Forward surge Current, 8.3 ms single 在额定的半正弦波叠加条件下 Half Sine-wave superimposed on Rated 负载符合(JEDEC方法) Load (JEDEC method) | I_{FSM} | 25.0 | | | | | | | A |
| 最大瞬时正向电压@ 1.0A Maximum Instantaneous Forward Voltage @1.0A | V_F | 0.55 | | 0.70 | | 0.85 | | V | |
| 最大直流反向电流@ $T_A=25^{\circ}C$ Maximum DC Reverse @ $T_A=25^{\circ}C$ | I_R | 10 | | | | | | | mA |
| 额定电流阻断电压@ $T_A=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A=100^{\circ}C$ | | 5 | | | | | | | |
| 典型的结电容(注1) Typical Junction Capacitance at 4.0V, 1MHz | C_j | 110 | | | | | | | pF |
| 操作温度范围 Operating Temperature Range | T_j | -65 to +125 | | | | | | | $^{\circ}C$ |
| 存储温度范围 Storage Temperature Range | T_{stg} | -65 to +125 | | | | | | | $^{\circ}C$ |



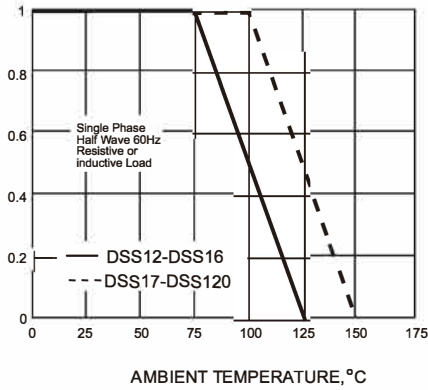
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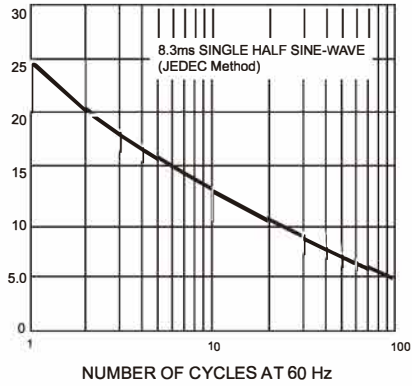
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



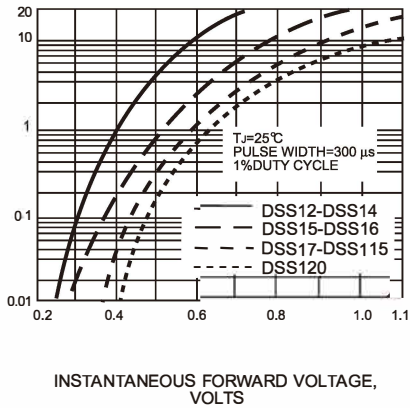
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



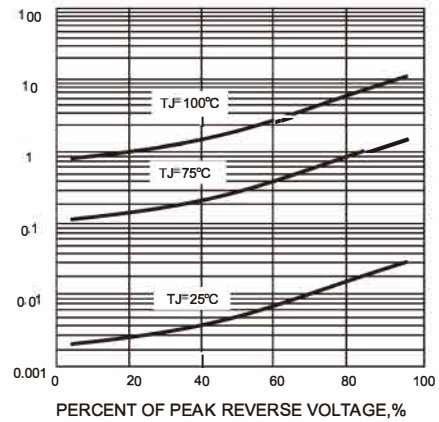
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

