

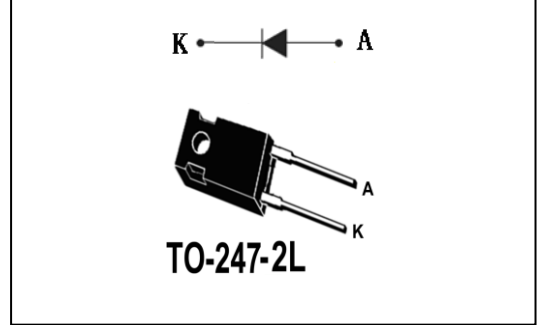


SC20J120BS

主要参数 MAIN CHARACTERISTICS

| | |
|-----------------------------------|-------|
| V_{RRM} | 1200V |
| $I_F, T_C \leq 150^\circ\text{C}$ | 20A |
| $Q_C \text{ Typ}$ | 114nC |

封装 Package



用途

- 光伏逆变器
- 开关模式电源
- 高压 DC/DC 转换器
- 电池充电器
- 电动驱动
- 不间断电源

APPLICATIONS

- Solar Inverters
- Switch Mode Power Supplies
- High Voltage DC/DC Converters
- Battery Chargers
- Motor Drives
- Uninterruptable power supplies

产品特性

- 高阻断电压
- 零反向恢复电流
- 零正向恢复电压
- 高频率应用
- 不受温度影响的开关特性
- 快速开关
- 正温度系数
- RoHS 产品

FEATURES

- High Blocking Voltage
- Zero Reverse Recovery Current
- Zero Forward Recovery Voltage
- High-Frequency Operation
- Temperature-Independent Switching Behavior
- Extremely Fast Switching
- Positive Temperature Coefficient on V_F
- RoHS product

订货信息 ORDER MESSAGE

| | | |
|-------------------------|------------|------------|
| 订货型号 Order codes | 印记 Marking | 封装 Package |
| 无卤-条管 Halogen-Free-Tube | | |
| SC20J120BS-GL-BR | SC20J120BS | TO-247-2L |



绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)

| 项 目 Parameter | 符 号 Symbol | 数 值 Value | 单 位 Unit |
|--|-----------------------------------|--------------|-------------|
| 反向重复峰值电压 Repetitive Peak Reverse Voltage | V _{RRM} | 1200 | V |
| 反向浪涌峰值电压 Surge Peak Reverse Voltage | V _{RSM} | 1200 | V |
| 反向直流电压 DC Blocking Voltage | V _{DC} | 1200 | V |
| 正向平均电流 Continuous Forward Current | I _F Tc=25℃ Tc=150℃ | 49 20 | A |
| 正向非重复浪涌电流 Non-Repetitive Peak Forward Surge Current | I _{FSM} | 120 | A |
| 正向重复浪涌电流 Repetitive Peak Forward Surge Current | I _{FRM} | 80 | A |
| 最高结温及存储温度 Operating and Storage Temperature Range | T _J , T _{STG} | -55~+175 | ℃ |
| 引线最高焊接温度 Maximum Lead Temperature for Soldering Purposes | T _L | 300 | ℃ |





电特性 ELECTRICAL CHARACTERISTICS

| 项 目 Parameter | 符 号 Symbol | 测试条件 Tests conditions | 最小 Min | 典型 Typ | 最大 Max | 单位 Units |
|----------------------------------|---------------|--|-----------|-------------------|------------|----------|
| 正向电压 Forward Voltage | V_F | $I_F = 20A$ $T_J = 25^\circ C$ $I_F = 20A$ $T_J = 175^\circ C$ | - | 1.42 1.94 | 1.7 3.0 | V |
| 反向电流 Reverse Current | I_R | $V_R = 1200V$ $T_J = 25^\circ C$ $V_R = 1200V$ $T_J = 175^\circ C$ | | 5 20 | 50 200 | μA |
| 总储存电荷 Total Capacitive Charge | Q_C | $V_R = 800V$, $T_J = 25^\circ C$ $Q_C = \int_0^{V_R} C(V) dV$ | | 114 | | nC |
| 总电容 Total Capacitance | C | $V_R = 0V$, $T_J = 25^\circ C$, $f = 1MHz$ $V_R = 400V$, $T_J = 25^\circ C$, $f = 1MHz$ $V_R = 800V$, $T_J = 25^\circ C$, $f = 1MHz$ | | 1300 103 85 | | pF |

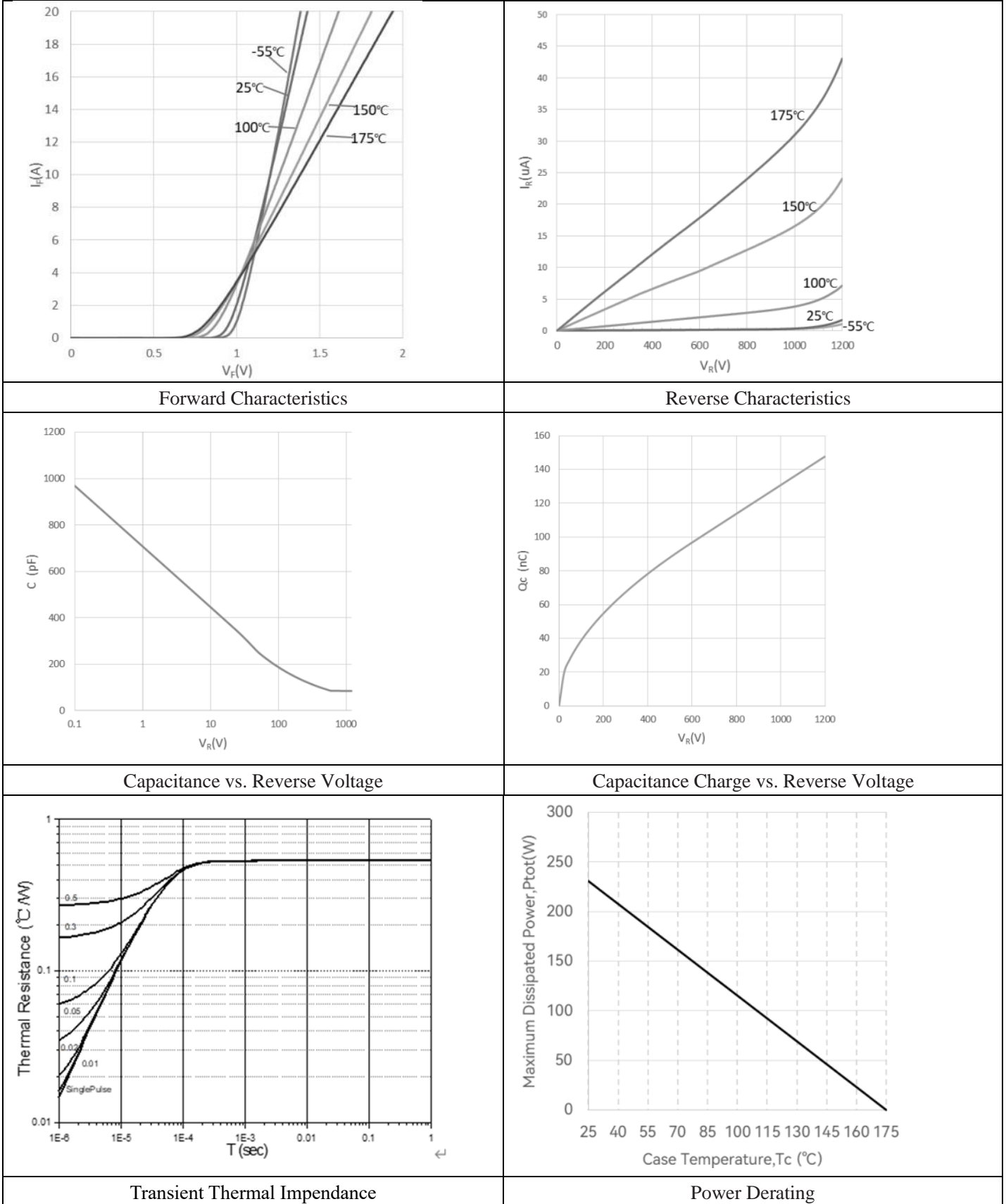
热特性 THERMAL CHARACTERISTICS

| 项 目 Parameter | 符 号 Symbol | 典型值 Typ | 单 位 Unit |
|--|---------------|------------|--------------|
| | | TO-247-2L | |
| 结到管壳的热阻 Thermal Resistance Junction to Case | $R_{th(j-c)}$ | 0.55 | $^\circ C/W$ |





典型性能 Typical Performance

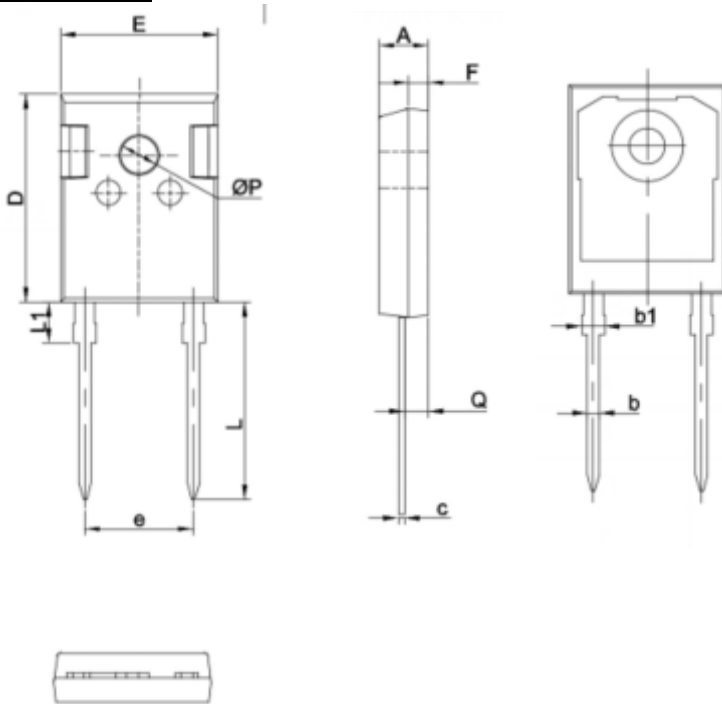




外形尺寸 PACKAGE MECHANICAL DATA

TO-247-2L

单位 Unit: mm



| SYMBOL | MM | |
|--------|-------|-------|
| | MIN | MAX |
| A | 4.80 | 5.20 |
| b | 1.10 | 1.30 |
| b1 | 1.95 | 2.25 |
| c | 0.50 | 0.70 |
| D | 20.80 | 21.20 |
| E | 15.60 | 16.00 |
| F | 1.85 | 2.15 |
| e | 10.73 | 11.03 |
| L | 19.62 | 20.22 |
| L1 | 3.93 | 4.33 |
| ØP | 3.40 | 3.80 |
| Q | 2.26 | 2.56 |





注意事项

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