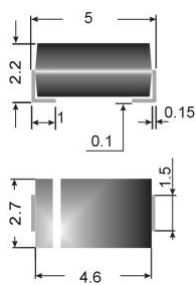


S2 SMA A ... S2 SMA M



Surface mount diode

Standard silicon rectifier diodes

S2 SMA A ... S2 SMA M

Forward Current: 2 A

Reverse Voltage: 50 to 1000 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0

Mechanical Data

- Plastic case: SMA / DO-214AC
- Weight approx.: 0,07 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 7500 pieces per reel

1) Max. temperature of the terminals $T_T = 80$ °C

2) $I_F = 2$ A, $T_J = 25$ °C

3) $T_A = 25$ °C

4) Mounted on P.C. board with 25 mm² copper pads at each terminal

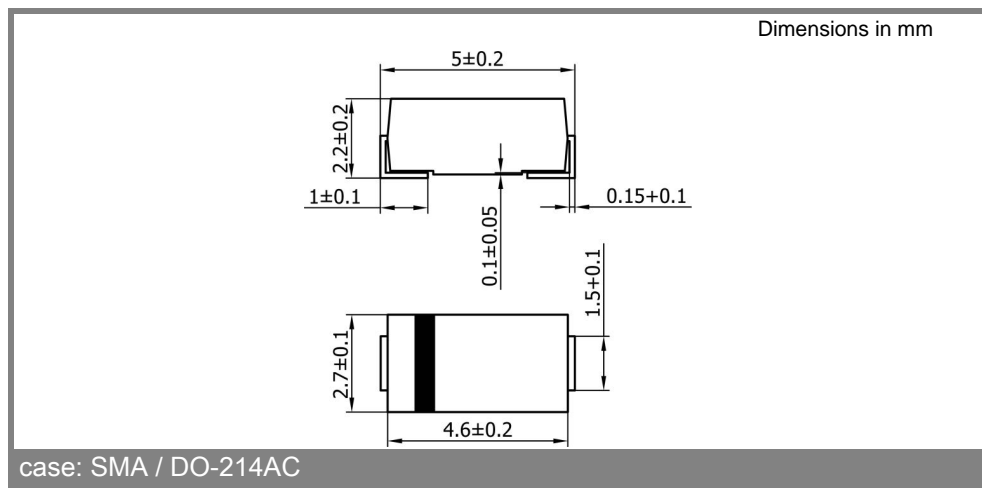
| Type | Polarity color band | Repetitive peak reverse voltage V_{RRM} V | Surge peak reverse voltage V_{RSM} V | Maximum forward voltage $T_J = 25$ °C $I_F = 2$ A $V_F^{(2)}$ V | Maximum reverse recovery time $I_F = -A$ $I_R = -A$ $I_{RR} = -A$ t_{rr} ns |
|----------|---------------------|---|--|---|--|
| S2 SMA A | - | 50 | 50 | 1,15 | - |
| S2 SMA B | - | 100 | 100 | 1,15 | - |
| S2 SMA D | - | 200 | 200 | 1,15 | - |
| S2 SMA G | - | 400 | 400 | 1,15 | - |
| S2 SMA J | - | 600 | 600 | 1,15 | - |
| S2 SMA K | - | 800 | 800 | 1,15 | - |
| S2 SMA M | - | 1000 | 1000 | 1,15 | - |

Absolute Maximum Ratings $T_A = 25$ °C, unless otherwise specified

| Symbol | Conditions | Values | Units |
|-----------|---|----------------|------------------|
| I_{FAV} | Max. averaged fwd. current, R-load, $T_T = 80$ °C ¹⁾ | 2 | A |
| I_{FRM} | Repetitive peak forward current $f > 15$ Hz ¹⁾ | 10 | A |
| I_{FSM} | Peak fwd. surge current 50 Hz half sinus-wave ³⁾ | 50 | A |
| I^2t | Rating for fusing, $t < 10$ ms ³⁾ | 12,5 | A ² s |
| R_{thA} | Max. thermal resistance junction to ambient ⁴⁾ | 70 | K/W |
| R_{thT} | Max. thermal resistance junction to terminals | 30 | K/W |
| T_J | Operating junction temperature | - 50 ... + 150 | °C |
| T_s | Storage temperature | - 50 ... + 150 | °C |

Characteristics $T_A = 25$ °C, unless otherwise specified

| Symbol | Conditions | Values | Units |
|-----------|--|--------|-------|
| I_R | Maximum leakage current, $T_J = 25$ °C; $V_R = V_{RRM}$ | <5 | µA |
| | $T_J = 100$ °C; $V_R = V_{RRM}$ | <100 | µA |
| C_J | Typical junction capacitance (at MHz and applied reverse voltage of V) | - | pF |
| Q_{rr} | Reverse recovery charge ($U_R = V$; $I_F = A$; $dI_F/dt = A/ms$) | - | µC |
| E_{RSM} | Non repetitive peak reverse avalanche energy (L = mH; $T_J =$ °C; inductive load switched off) | - | mJ |



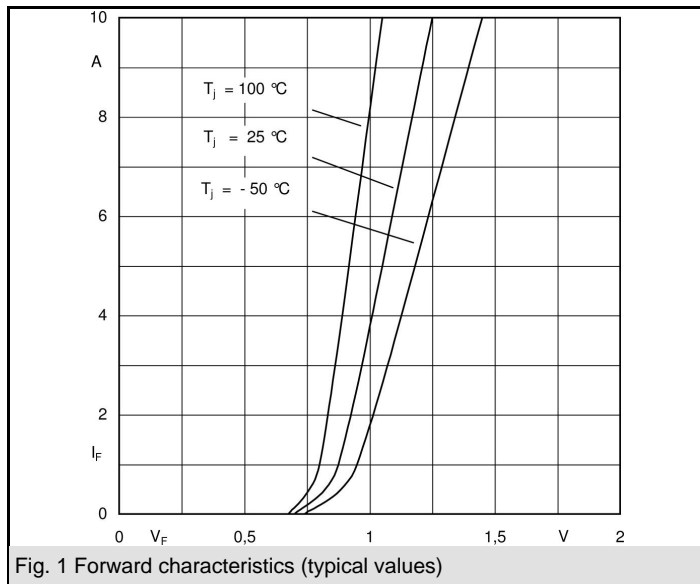


Fig. 1 Forward characteristics (typical values)

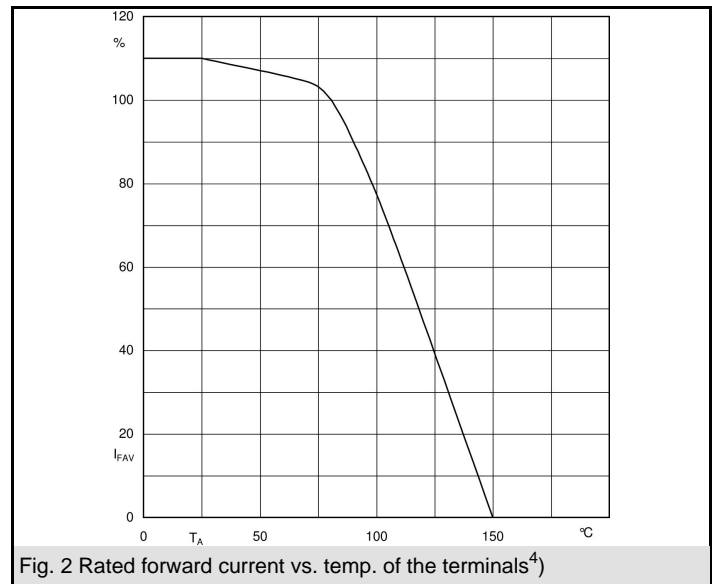


Fig. 2 Rated forward current vs. temp. of the terminals⁴⁾