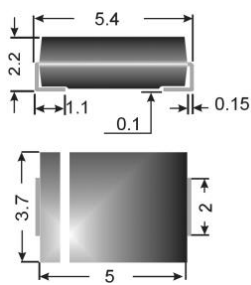


S2 T ... S2 Y



Surface mount diode

Standard silicon rectifier diodes

S2 T ... S2 Y

Forward Current: 2 A

Reverse Voltage: 1300 to 2000 V

Features

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

Mechanical Data

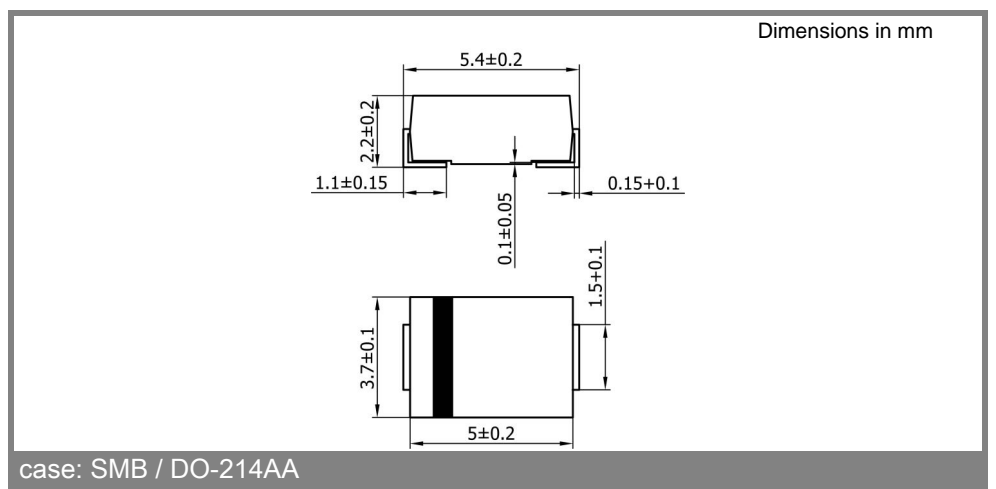
- Plastic case: SMB / DO-214AA
- Weight approx.: 0,1 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 3000 pieces per reel

- 1) Max. temperature of the terminals $T_T = 100\text{ °C}$
- 2) $I_F = 2\text{ A}$, $T_J = 25\text{ °C}$
- 3) $T_A = 25\text{ °C}$
- 4) Mounted on P.C. board with 50 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 $T_j = 25\text{ °C}$ $I_F = 2\text{ A}$ $V_F^{(2)}$ V	Maximum reverse recovery time $I_F = -A$ $I_R = -A$ $I_{RR} = -A$ t_{rr} ns
S2 T	-	1300	1300	1,15	-
S2 W	-	1600	1600	1,15	-
S2 X	-	1800	1800	1,15	-
S2 Y	-	2000	2000	1,15	-

Absolute Maximum Ratings		$T_A = 25\text{ °C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, $T_T = 100\text{ °C}$ ¹⁾	2	A
I_{FRM}	Repetitive peak forward current $f > 15\text{ Hz}$ ¹⁾	10	A
I_{FSM}	Peak fwd. surge current 50 Hz half sinus-wave ³⁾	50	A
I^2t	Rating for fusing, $t < 10\text{ ms}$ ³⁾	12,5	A ² s
R_{thA}	Max. thermal resistance junction to ambient ⁴⁾	60	K/W
R_{thT}	Max. thermal resistance junction to terminals	15	K/W
T_j	Operating junction temperature	-50 ... +150	°C
T_s	Storage temperature	-50 ... +150	°C

Characteristics		$T_A = 25\text{ °C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
I_R	Maximum leakage current, $T_j = 25\text{ °C}$; $V_R = V_{RRM}$ $T_j = 100\text{ °C}$; $V_R = V_{RRM}$	<5 <100	μA 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 ($L = \text{mH}$; $T_j = \text{°C}$; inductive load switched off)	-	mJ



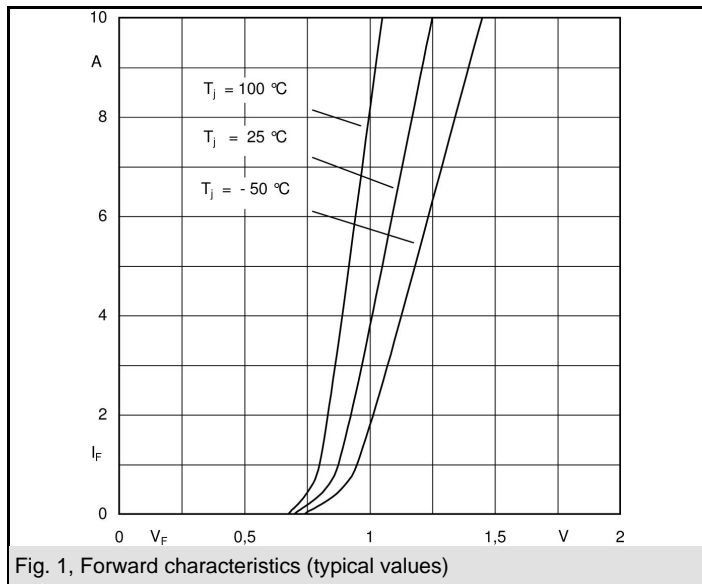


Fig. 1, Forward characteristics (typical values)

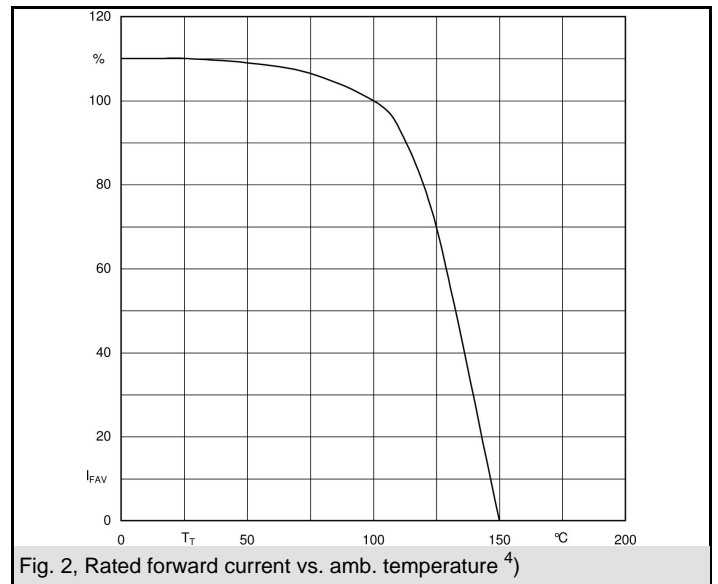


Fig. 2, Rated forward current vs. amb. temperature ⁴⁾