SA 261 ... SA 265

Surface mount diode

Fast silicon rectifier diodes

SA 261... SA 265

Forward Current: 2 A

Reverse Voltage: 1200 to 2000 V

Features

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

Mechanical Data

- Plastic case Melf / DO-213AB
- Weight approx.: 0,12 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 5000 pieces per reel

1) Max. temperature of the terminals T_T = 100 °C

2) I_F = 2 A, T_J = 25 °C

3) T_A = 25 °C

4) Mounted on P.C. board with 50 mm^2 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 = 0,5 A I_R = 1 A I_{RR} = 0,25 A t_{rr} ns
SA 261	-	1200	1200	1,8	500
SA 262	-	1400	1400	1,8	500
SA 263	-	1600	1600	1,8	500
SA 264	-	1800	1800	1,8	500
SA 265	-	2000	2000	1,8	500

Absolute Maximum Ratings		T_A = 25 °C, unless otherwise specified	
Symbol	**Conditions**	**Values**	**Units**
I_{FAV}	Max. averaged fwd. current, R-load, T_T = 100 °C	2	A
I_{FRM}	Repetitive peak forward current f > 15 Hz[1)]	10	A
I_{FSM}	Peak fwd. surge current 60 Hz half sinus-wave [3)]	50	A
I^2t	Rating for fusing, t < 10 ms [3)]	12,5	A²s
R_{thA}	Max. thermal resistance junction to ambient [4)]	45	K/W
R_{thT}	Max. thermal resistance junction to terminals	15	K/W
T_j	Operating junction temperature	-50...+175	°C
T_s	Storage temperature	-50...+175	°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 1 MHz and applied reverse voltage of 4 V)	18	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 (I_R = mA; T_j = °C; inductive load switched off)	-	mJ
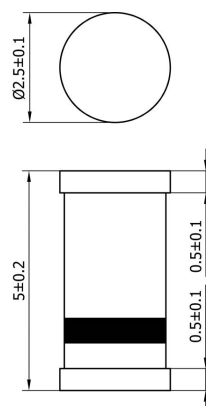
Dimensions in mm

case : Melf / DO-213AB

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Fig. 1 Forward characteristics (typical values)

Fig. 2 Rated forward current vs. ambient temperature [4])

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