

Surface mount diode

Standard Avalanche Diodes

GLA 1A ... GLA 1M

Forward Current: 1 A

Reverse Voltage: 50 to 1000 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- white ring denotes "cathode" and "Standard Avalanche family"
- colored ring denotes "repetitive peak reverse voltage"

Mechanical Data

- Plastic case: MiniMelf / SOD-80 / DO-213AA
- Weight approx.: 0,04 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 10000, 2500 pieces per reel

- Max. temperature of the terminals $T_T = 75^\circ\text{C}$
- $I_F = 1\text{ A}$, $T_J = 25^\circ\text{C}$
- $T_A = 25^\circ\text{C}$
- 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 $T_J = 25^\circ\text{C}$ $I_F = 1\text{ A}$ $V_F^{(2)}$ V	Maximum reverse recovery time $I_F = -\text{A}$ $I_R = -\text{A}$ $I_{RR} = -\text{A}$ t_{rr} ns
GLA 1A	gray	50	50	1,2	-
GLA 1B	red	100	100	1,2	-
GLA 1D	orange	200	200	1,2	-
GLA 1G	yellow	400	400	1,2	-
GLA 1J	green	600	600	1,2	-
GLA 1K	blue	800	800	1,2	-
GLA 1M	violet	1000	1000	1,2	-

Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$, unless otherwise specified

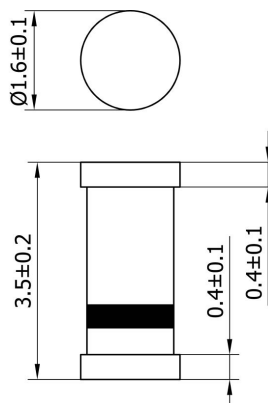
Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, $T_T = 75^\circ\text{C}$ ¹⁾	1	A
I_{FRM}	Repetitive peak forward current $f > \text{Hz}$	-	A
I_{FSM}	Peak fwd. surge current 50 Hz half sinus-wave ³⁾	25	A
I^2t	Rating for fusing, $t < 10\text{ ms}$ ³⁾	3,1	A ² s
R_{thA}	Max. thermal resistance junction to ambient ⁴⁾	150	K/W
R_{thT}	Max. thermal resistance junction to terminals	60	K/W
T_J	Operating junction temperature	- 50 ... + 175	°C
T_s	Storage temperature	- 50 ... + 175	°C

Characteristics

$T_A = 25^\circ\text{C}$, unless otherwise specified

Symbol	Conditions	Values	Units
I_R	Maximum leakage current, $T_J = 25^\circ\text{C}$; $V_R = V_{RRM}$ $T_J = ^\circ\text{C}$; $V_R = V_{RRM}$	<1	µA
C_J	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
Q_{rr}	Reverse recovery charge ($U_R = V$; $I_F = \text{A}$; $dI_F/dt = \text{A/ms}$)	-	µC
E_{RSM}	Non repetitive peak reverse avalanche energy ($I_R = 1\text{ mA}$; $T_J = 25^\circ\text{C}$; inductive load switched off)	20	mJ

Dimensions in mm



case: MiniMelf / DO-213AA

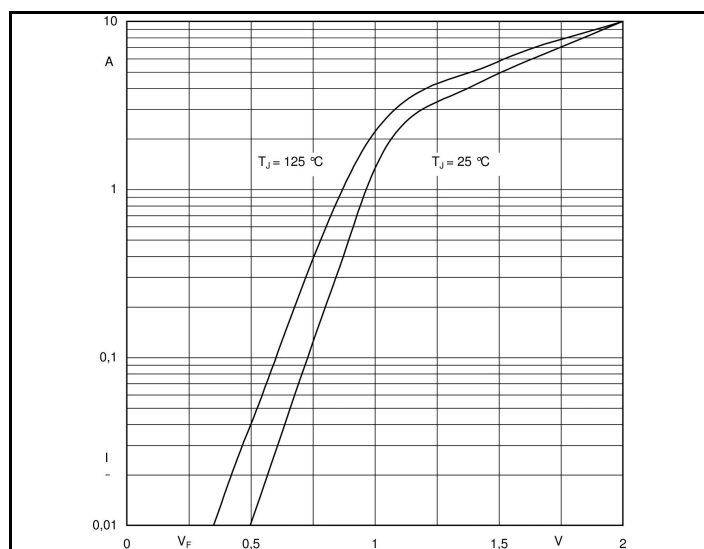


Fig. 1 Forward characteristics (typical values)

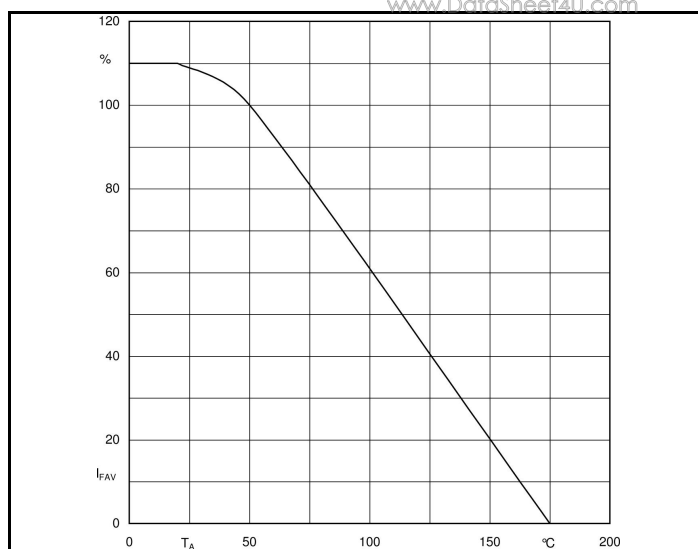


Fig. 2 Rated forward current vs. temp. of the terminals⁴⁾