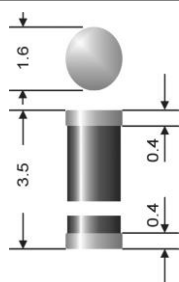


RGA 57A ... RGA 57M



Surface mount diode

Ultrafast Avalanche Diodes

RGA 57A ... RGA 57M

Forward Current: 1 A

Reverse Voltage: 50 to 1000 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- yellow ring denotes "cathode" and "ultrafast avalanche diodes"
- second ring denotes "repetitive peak reverse voltage"

Mechanical Data

- Plastic case: MiniMelf / SOD80 / 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

- 1) Max. temperature of the terminals $T_T = 75^\circ\text{C}$
- 2) $I_F = 1\text{ A}$, $T_J = 25^\circ\text{C}$
- 3) $T_A = 25^\circ\text{C}$
- 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 $T_J = 25^\circ\text{C}$ $I_F = 1\text{ A}$ $V_F^{(2)}$ V	Maximum reverse recovery time $I_F = 0,5\text{ A}$ $I_R = 1\text{ A}$ $I_{RR} = 0,25\text{ A}$ t_{rr} ns
RGA 57A	gray	50	50	1,25	50
RGA 57B	red	100	100	1,25	50
RGA 57D	orange	200	200	1,25	50
RGA 57G	yellow	400	400	1,35	50
RGA 57J	green	600	600	1,9	75
RGA 57K	blue	800	800	1,9	75
RGA 57M	violet	1000	1000	1,9	75

Absolute Maximum Ratings

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

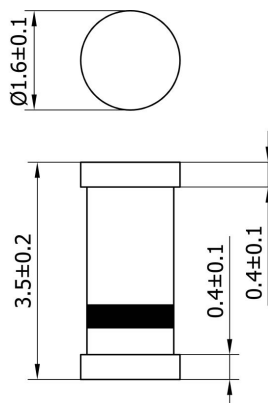
Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, $T_T = 75^\circ\text{C}$ ¹⁾	1	A
I_{FRM}	Repetitive peak forward current $f > 15\text{ Hz}$ ¹⁾	8	A
I_{FSM}	Peak fwd. surge current 50 Hz half sinus-wave ³⁾	20	A
I^2t	Rating for fusing, $t < 10\text{ ms}$ ³⁾	2	A ² s
R_{thA}	Max. 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, $T_J = 25^\circ\text{C}$; $V_R = V_{RRM}$	<3	μA
	$T_J = 125^\circ\text{C}$; $V_R = V_{RRM}$	<50	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 ($I_R = 1\text{ mA}$; $T_J = 25^\circ\text{C}$; inductive load switched off)	20	mJ

Dimensions in mm



case: MiniMelf / DO-213AA

