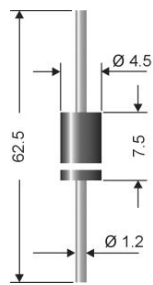


UF 5400...UF 5408



Axial lead diode

Ultrafast silicon rectifier diodes

UF 5400...UF 5408

Forward Current: 3 A

Reverse Voltage: 50 to 1000 V

Features

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

Mechanical Data

- Plastic case DO-201
- Weight approx.: 1 g
- Terminals : plated terminals solderable per MIL-STD-750
- Mounting position : any
- Standard packaging : 1700 pieces per ammo

1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

2) $I_F = 3 \text{ A}$, $T_J = 25^\circ\text{C}$

3) $T_A = 25^\circ\text{C}$

Type	Repetitive peak reverse voltage V_{RRM} V	Surge peak reverse voltage V_{RSM} V	Max. reverse recovery time $I_F = 0,5 \text{ A}$ $I_R = 1 \text{ A}$ $I_{RR} = 0,25 \text{ A}$ t_{rr} ns	Max. forward voltage $V_F^{2)}$
UF 5400	50	50	50	1,0
UF 5401	100	100	50	1,0
UF 5402	200	200	50	1,0
UF 5403	300	300	50	1,0
UF 5404	400	400	50	1,25
UF 5405	500	500	75	1,7
UF 5406	600	600	75	1,7
UF 5407	800	800	75	1,7
UF 5408	1000	1000	75	1,7

Absolute Maximum Ratings $T_C = 25^\circ\text{C}$, unless otherwise specified			
Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}$ ¹⁾	3	A
I_{FRM}	Repetitive peak forward current $f > 15 \text{ Hz}$ ¹⁾	30	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave ³⁾	100	A
i^2t	Rating for fusing, $t < 10 \text{ ms}$ ³⁾	50	A ² s
R_{thA}	Max. thermal resistance junction to ambient ¹⁾	25	K/W
R_{thT}	Max. thermal resistance junction to terminals ¹⁾	8	K/W
T_J	Operating junction temperature	-50...+150	°C
T_s	Storage temperature	-50...+175	°C

Characteristics $T_C = 25^\circ\text{C}$, unless otherwise specified			
Symbol	Conditions	Values	Units
I_R	Maximum leakage current, $T_J = 25^\circ\text{C}$; $V_R = V_{RRM}$	<10	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 ($I_R = mA$; $T_J = ^\circ\text{C}$; inductive load switched off)	-	mJ

