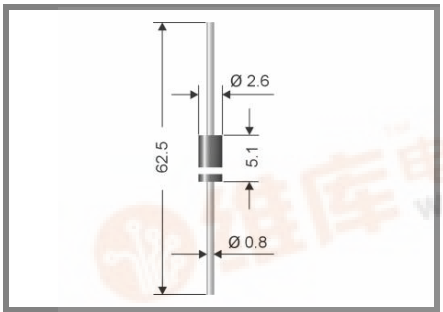
UF 4001...UF 4007, UF 4007-1200



Axial lead diode

Ultrafast silicon rectifier diodes

UF 4001...UF 4007, UF 4007-1200

Forward Current: 1 A

Reverse Voltage: 50 to 1200 V

Features

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

Mechanical Data

- Plastic case DO-41 / DO-204AL
- Weight approx.: 0,4 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 5000 pieces per ammo

1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case
2) I_F = 1A, T_j= 25 °C
3) T_A = 25 °C

Type	Repetitive peak reverse voltage V_{RRM} V	Surge peak reverse voltage V_{RSM} V	Max. reverse recovery time I_F = 0,5 A, I_R = 1,0 A, I_{RR} = 0,25 A t_{rr} ns	Max. forward voltage V_F 2)
UF 4001	50	50	50	1,0
UF 4002	100	100	50	1,0
UF 4003	200	200	50	1,0
UF 4004	400	400	50	1,25
UF 4005	600	600	75	1,7
UF 4006	800	800	75	1,7
UF 4007	1000	1000	75	1,7
UF 4007-1200	1200	1200	75	1,7

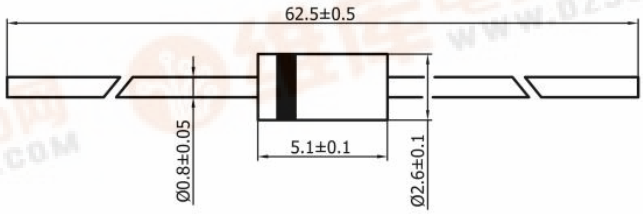
Absolute Maximum Ratings T_c = 25 °C, unless otherwise specified

Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C 1)	1	A
I_{FRM}	Repetitive peak forward current f > 15 Hz 1)	10	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave 3)	30	A
i²t	Rating for fusing, t < 10 ms 3)	4,5	A²s
R_{thA}	Max. thermal resistance junction to ambient 1)	45	K/W
R_{thT}	Max. thermal resistance junction to terminals 1)	15	K/W
T_j	Operating junction temperature	-50...+150	°C
T_s	Storage temperature	-50...+175	°C

Characteristics T_c = 25 °C, unless otherwise specified

Symbol	Conditions	Values	Units
I_R	Maximum leakage current, T_j = 25 °C; V_R = V_{RRM}	<10	µA
	T_j = 100 °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 = °C; inductive load switched off)	-	mJ

Dimensions in mm



case: DO-41 / DO-204AL

UF 4001...UF 4007, UF 4007-1200

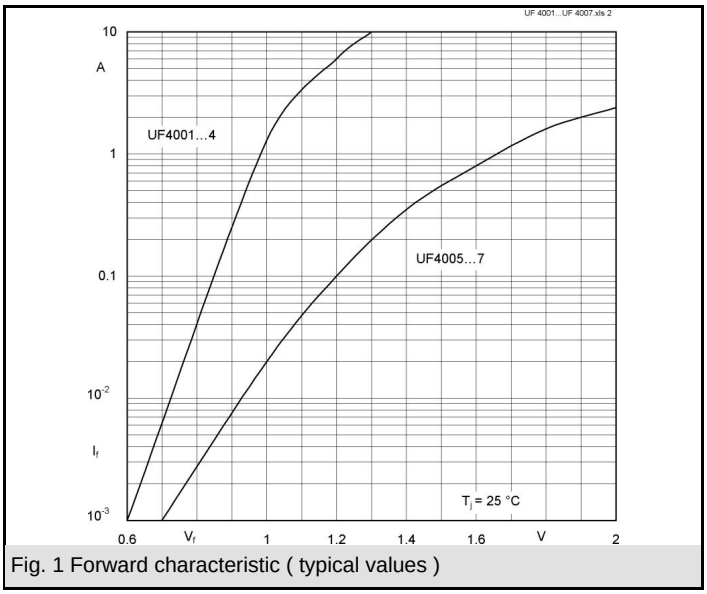


Fig. 1 Forward characteristic (typical values)

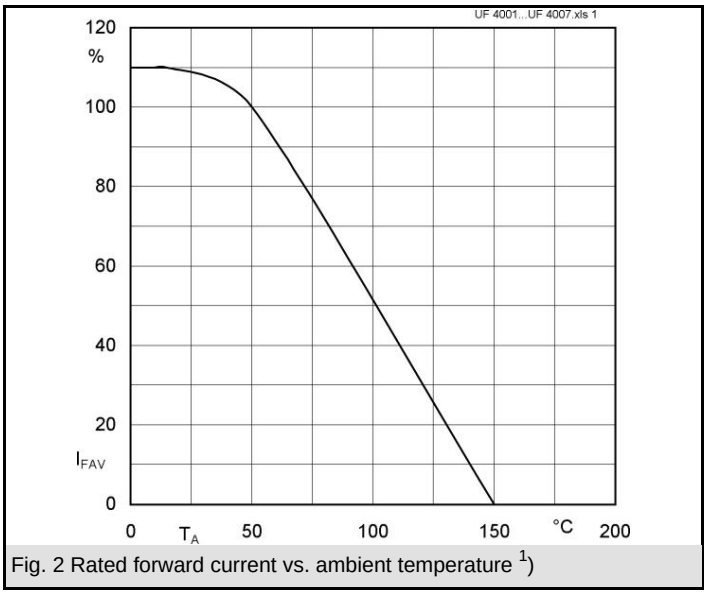


Fig. 2 Rated forward current vs. ambient temperature [1])