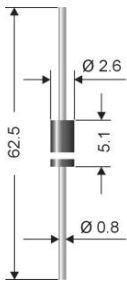


# 1N 4001...1N 4007, 1N 4007-1300



## Axial lead diode

## Standard silicon rectifier diodes

1N 4001...1N 4007, 1N 4007-1300

Forward Current: 1 A

Reverse Voltage: 50 to 1300 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

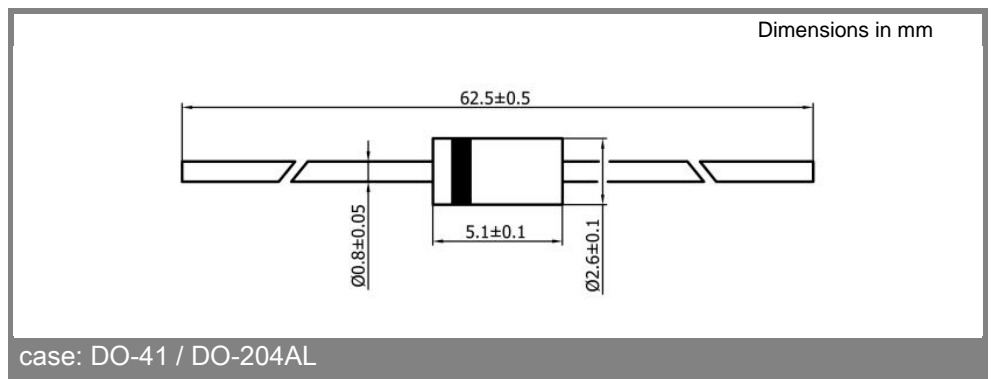
2)  $I_F = 1A$ ,  $T_j = 25^\circ C$

3)  $T_A = 25^\circ C$

Type	Repetitive peak reverse voltage $V_{RRM}$ V	Surge peak reverse voltage $V_{RSM}$ V	Max. reverse recovery time $I_F = -A$ $I_R = -A$ $I_{RR} = -A$ $t_{rr}$ ns	Max. forward voltage $V_F^{(2)}$
1N 4001	50	50	-	1,1
1N 4002	100	100	-	1,1
1N 4003	200	200	-	1,1
1N 4004	400	400	-	1,1
1N 4005	600	600	-	1,1
1N 4006	800	800	-	1,1
1N 4007	1000	1000	-	1,1
1N 4007-1300	1300	1300	-	1,1

Absolute Maximum Ratings		$T_c = 25^\circ C$ unless otherwise specified	
Symbol	Conditions	Values	Units
$I_{FAV}$	Max. averaged fwd. current, R-load, $T_A = 75^\circ C$ 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)	50	A
$i^2t$	Rating for fusing, $t < 10 ms$ 3)	12,5	A <sup>2</sup> s
$R_{thA}$	Max. thermal resistance junction to ambient 1)	45	K/W
$R_{thT}$	Max. thermal resistance junction to terminals 1)	-	K/W
$T_j$	Operating junction temperature	-50...+175	°C
$T_s$	Storage temperature	-50...+175	°C

Characteristics		$T_c = 25^\circ C$ , unless otherwise specified	
Symbol	Conditions	Values	Units
$I_R$	Maximum leakage current, $T_j = 25^\circ C$ ; $V_R = V_{RRM}$	<5	$\mu A$
	$T_j = 100^\circ C$ ; $V_R = V_{RRM}$	<50	$\mu A$
$C_j$	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
$Q_{rr}$	Reverse recovery charge ( $U_R = V$ ; $I_F = A$ ; $dI_F/dt = A/ms$ )	-	$\mu C$
$E_{RSM}$	Non repetitive peak reverse avalanche energy ( $I_R = mA$ ; $T_j = ^\circ C$ ; inductive load switched off)	-	mJ



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