

Features

- ◆ Silicon Epitaxial Planar Diode
- ◆ Fast switching diode
- ◆ This diode is also available in other case styles including the MiniMELF case with the type designation LL4151.



DO-204AH (DO-35 Glass)

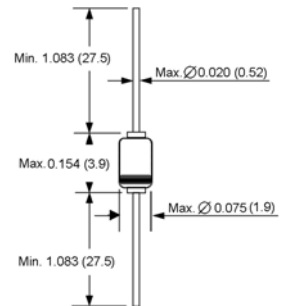
Mechanical Data

- ◆ Case: DO-34, DO-35 Glass Case
- ◆ Weight: approx. 0.13g

Maximum Ratings and Thermal Characteristics

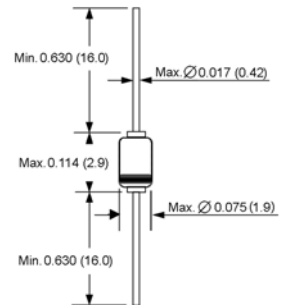
($T_A=25^\circ\text{C}$ unless otherwise noted.)

Parameter	Symbol	Limit	Unit
Reverse voltage	V_R	50	Volts
Peak reverse voltage	V_{RM}	75	Volts
Average rectified current half wave rectification with resistive load at $T_{amb}=25^\circ\text{C}$ and $f_z=50\text{Hz}$ ⁽¹⁾	$I_{F(AV)}$	150	mA
Surge forward current at $t<1\text{s}$ and $T_j=25^\circ\text{C}$	I_{FSM}	500	mA
Power dissipation at $T_{amb}=25^\circ\text{C}$ ⁽¹⁾	P_{tot}	500	mW
Thermal resistance junction to ambient air ⁽¹⁾	$R_{\theta JA}$	350	$^\circ\text{C/W}$
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature range	T_S	-65 to +175	$^\circ\text{C}$



Dimensions in inches and (millimeters)

DO-34 Glass



Dimensions in inches and (millimeters)

Electrical Characteristics

($T_j=25^\circ\text{C}$ unless otherwise noted.)

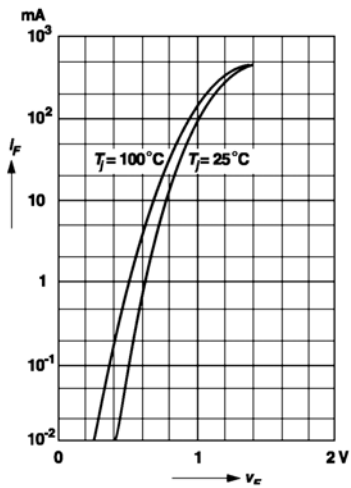
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=5\mu\text{A}$ (pulsed)	75	-	-	Volts
Forward voltage	V_F	$I_F=50\text{mA}$	-	-	1.0	Volt
Leakage current	I_R	$V_R=50\text{V}$ $V_R=50\text{V}$, $T_j=150^\circ\text{C}$	-	-	50 50	nA uA
Capacitance	C_{tot}	$V_F=V_R=0\text{V}$	-	-	2.0	pF
Reverse recovery time	t_{rr}	$I_F=10\text{mA}$ to $I_R=10\text{mA}$ to $I_R=1\text{mA}$ $I_F=10\text{mA}$ to $I_R=1\text{mA}$ $V_R=6\text{V}$, $R_f=100\Omega$	-	-	4.0 2.0	ns
Rectification efficiency	η_V	$f=100\text{MHz}$, $V_{RF}=2\text{V}$	0.45	-	-	-

Notes: 1. Valid provided that leads at a distance of 8mm from case are kept at ambient temperature

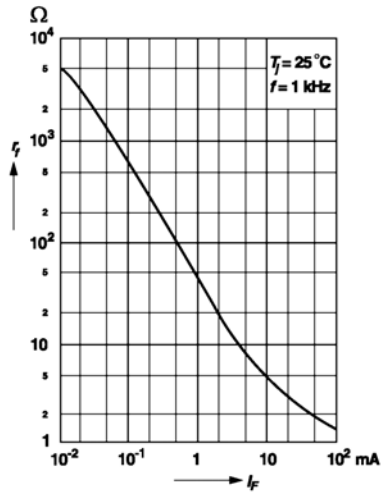
RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Forward characteristics

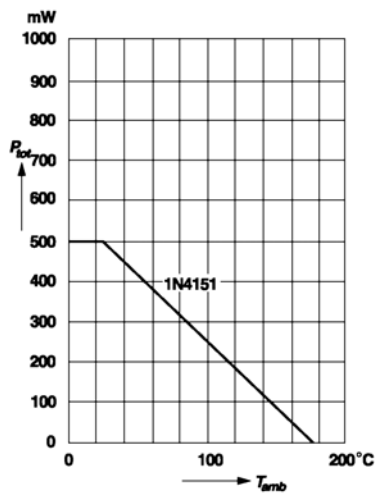


Dynamic forward resistance versus forward current

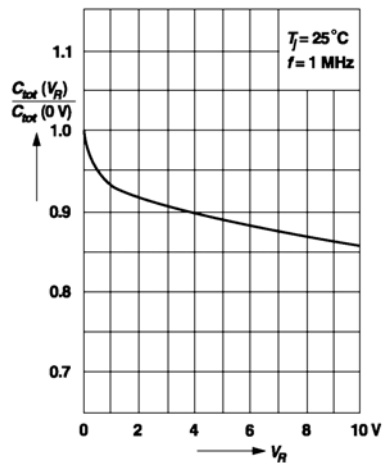


Admissible power dissipation versus ambient temperature

For conditions, see footnote in table "Absolute Maximum Ratings"



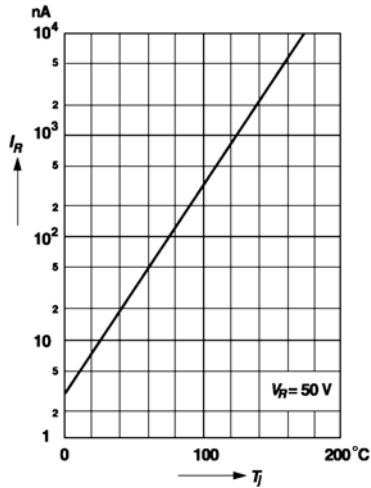
Relative capacitance versus reverse voltage



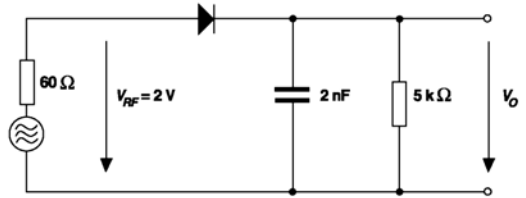
RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Leakage current versus junction temperature



Rectification Efficiency Measurement Circuit



Admissible repetitive peak forward current versus pulse duration

For conditions, see footnote in table "Absolute Maximum Ratings"

