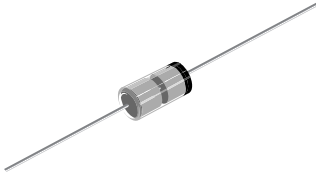
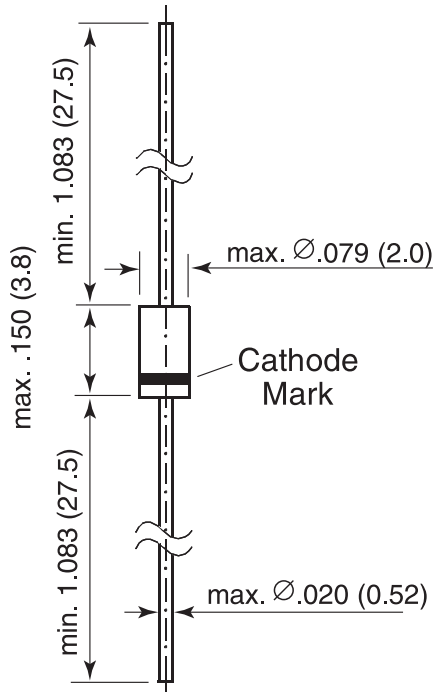


## Small-Signal Diode

Reverse Voltage 100V  
Forward Current 150mA



### DO-204AH (DO-35 Glass)



Dimensions in inches and (millimeters)

### Features

- Silicon Epitaxial Planar Diode
- Fast switching diode.
- This diode is also available in other case styles including the SOD-123 case with the type designation 1N4148W, the MiniMELF case with the type designation LL4148, the SOT-23 case with the type designation IMBD4148, and the DO-34 case with type designation 1N4148S.

### Mechanical Data

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

**Packaging Codes/Options:**

F2/10K per Ammo tape (52mm tape), 50K/box  
F3/10K per 13" reel (52mm tape), 50K/box

### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
Average Rectified Current Half Wave Rectification with Resistive Load at T <sub>amb</sub> = 25°C	I <sub>F(AV)</sub>	150 <sup>(1)</sup>	mA
Surge Forward Current at t < 1s and T <sub>j</sub> = 25°C	I <sub>FSM</sub>	500	mA
Power Dissipation at T <sub>amb</sub> = 25°C <sup>(1)</sup>	P <sub>tot</sub>	500	mW
Thermal Resistance Junction to Ambient Air <sup>(1)</sup>	R <sub>θJA</sub>	350	°C/W
Junction Temperature	T <sub>j</sub>	175	°C
Storage Temperature	T <sub>S</sub>	-65 to +175	°C

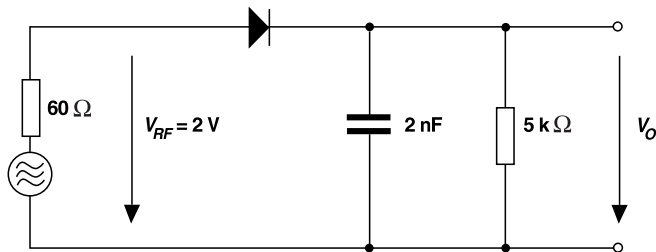
**Note:**

(1) Valid provided that leads at a distance of 8mm from case are kept at ambient temperature

**Electrical Characteristics** ( $T_J = 25^\circ\text{C}$  unless otherwise noted)

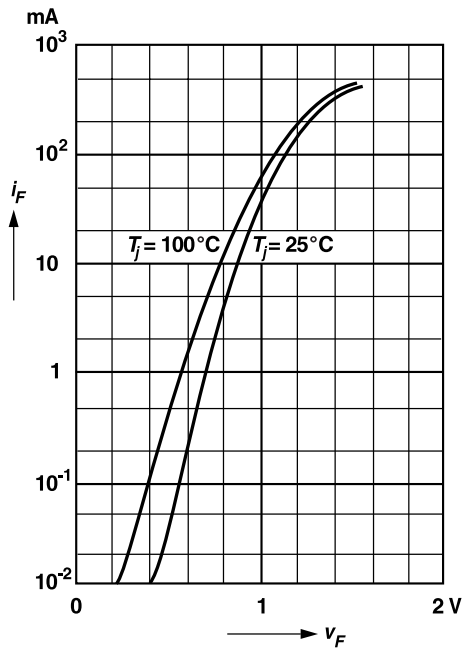
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	100			V
Forward Voltage	$V_F$	$I_F = 10\text{mA}$	—	—	1.0	V
Leakage Current	$I_R$	$V_R = 20\text{V}$	—	—	25	nA
		$V_R = 75\text{V}$	—	—	5	$\mu\text{A}$
		$V_R = 20\text{V}, T_J = 150^\circ\text{C}$	—	—	50	$\mu\text{A}$
Capacitance	$C_{tot}$	$V_F = V_R = 0\text{V}$	—	—	4	pF
Voltage Rise when Switching ON (tested with 50mA Pulses)	$V_{fr}$	$t_p = 0.1\mu\text{s}$ , Rise time < 30ns $f_p = 5$ to 100kHz	—	—	2.5	ns
Reverse Recovery Time	$t_{rr}$	$I_F = 10\text{mA}, I_R = 1\text{mA},$ $V_R = 6\text{V}, R_L = 100\Omega$	—	—	4	ns
Rectification Efficiency	$\eta_v$	$f = 100\text{MHz}, V_{RF} = 2\text{V}$	0.45	—	—	—

**Rectification Efficiency Measurement Circuit**

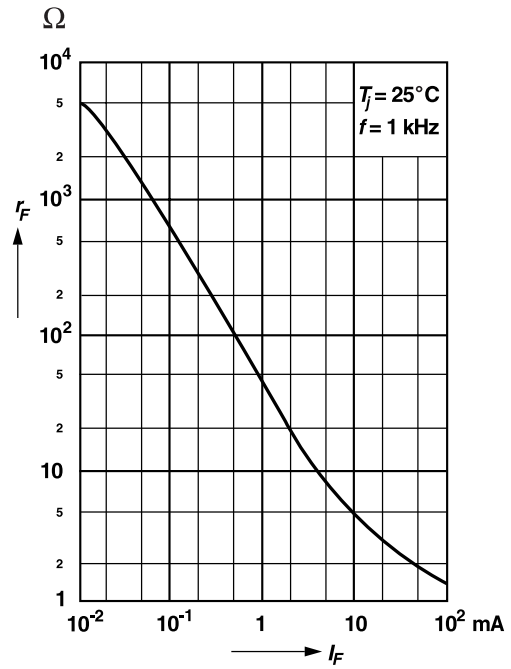


Ratings and Characteristic Curves (T<sub>A</sub> = 25°C unless otherwise noted)

Forward characteristics

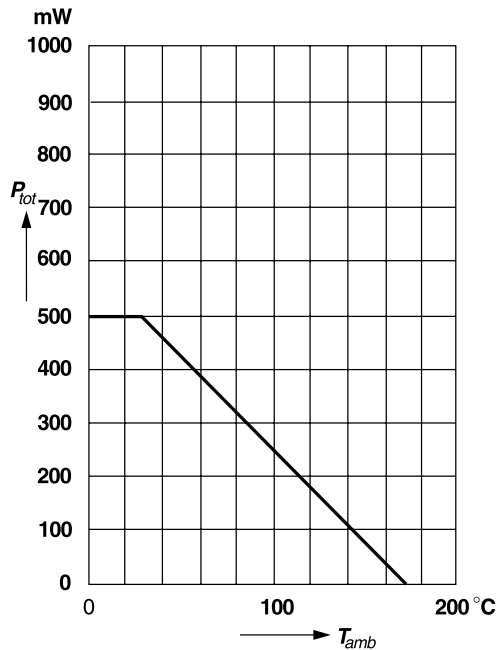


Dynamic forward resistance versus forward current

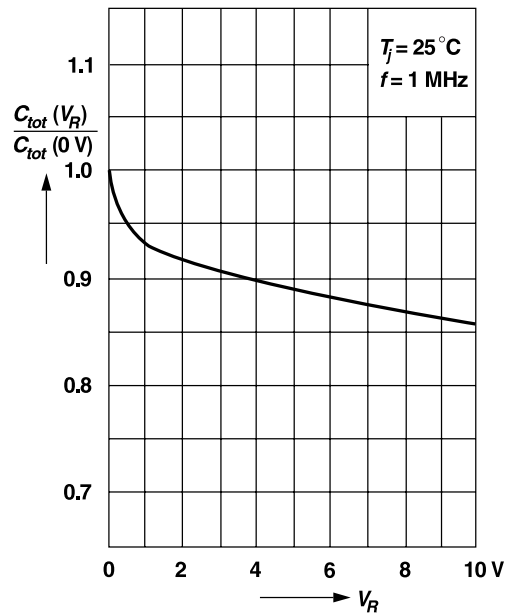


Admissible power dissipation versus ambient temperature

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

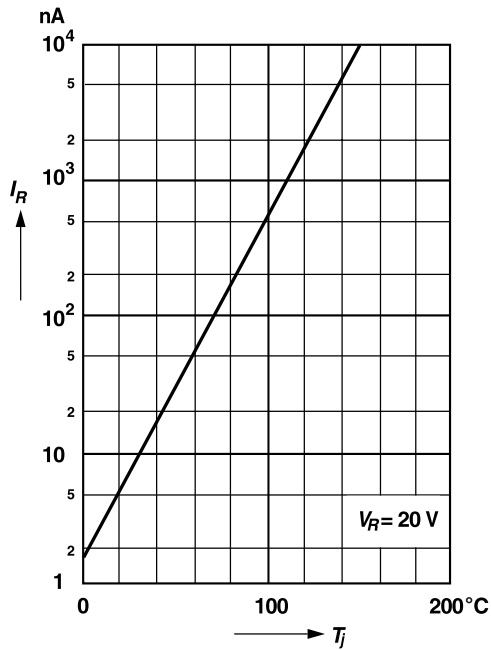


Relative capacitance versus reverse voltage



Ratings and Characteristic Curves (T<sub>A</sub> = 25°C unless otherwise noted)

Leakage current versus junction temperature



Admissible repetitive peak forward current versus pulse duration

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

