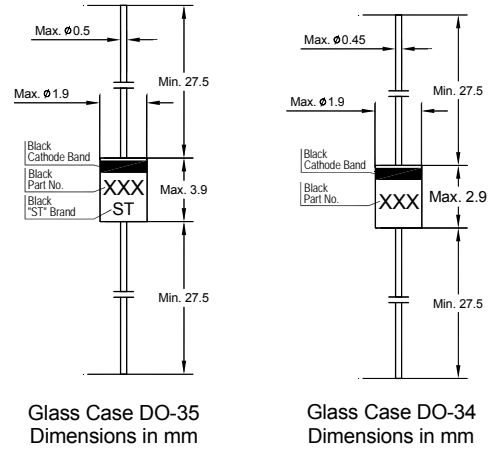


# 1N4149...1N4454

## SILICON EPITAXIAL PLANAR DIODES

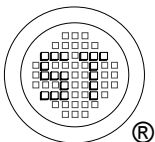
for general purpose and switching



### Absolute Maximum Ratings and Characteristics ( $T_a = 25^\circ\text{C}$ unless otherwise specified.)

Type	Peak Reverse Voltage	Max. Average Rectified Current	Max. Power Dissipation at 25 °C	Max. Junction Temp.	Max. Forward Voltage		Max. Reverse Current		Max. Reverse Recovery Time	
	$V_{RM}$ (V)	$I_o$ (mA) <sup>2)</sup>	$P_{tot}$ (mW) <sup>2)</sup>	$T_j$ (°C)	$V_F$ (V)	at $I_F$ (mA)	$I_R$ (nA)	at $V_R$ (V)	$t_{rr}$ (ns)	Conditions
1N4149 <sup>1)</sup>	100	150	500	200	1	10	25	20	4	$I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$ , to $I_R = 1\text{ mA}$
1N4151	75	150	500	200	1	50	50	50	2	$I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$ , to $I_R = 1\text{ mA}$
1N4152	40	150	400	175	0.55	0.1	50	30	2	$I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$ , to $I_R = 1\text{ mA}$
1N4154	35	150	500	200	1	30	100	25	2	$I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$ , to $I_R = 1\text{ mA}$
1N4447 <sup>1)</sup>	100	150	500	200	1	20	25	20	4	$I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$ , to $I_R = 1\text{ mA}$
1N4449 <sup>1)</sup>	100	150	500	200	1	30	25	20	4	$I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$ , to $I_R = 1\text{ mA}$
1N4450	40	150	400	175	0.54	0.5	50	30	4	$I_F = I_R = 10\text{ mA}$ , to $I_R = 1\text{ mA}$
1N4451	40	150	400	175	0.5	0.1	50	30	10	$I_F = I_R = 10\text{ mA}$ , to $I_R = 1\text{ mA}$
1N4453	30	150	400	175	0.55	0.01	50	20	-	-
1N4454	75	150	400	175	1	10	100	50	4	$I_F = I_R = 10\text{ mA}$ , to $I_R = 1\text{ mA}$

<sup>1)</sup> These diodes are also available in glass case DO-34. Parameter for diodes in case DO-34:  $P_{tot} = 300\text{ mW}$ ,  $T_j = 175^\circ\text{C}$   
<sup>2)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



**SEMTECH ELECTRONICS LTD.**  
 (Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
 Certificate No. 05103

ISO 14001:2004  
 Certificate No. 7116

ISO 9001:2000  
 Certificate No. 0506098

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