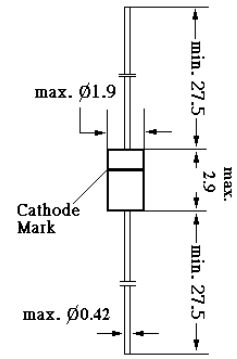


# 1N4531, 1N4532

## SILICON EPITAXIAL PLANAR DIODES

Fast Switching Diode.

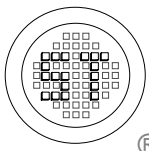


Glass case JEDEC DO-34

Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	75	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Continuous Forward Current	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Current $T_j = 25^\circ\text{C}$			
at $t = 1\mu\text{s}$	$I_{FSM}$	4	A
at $t = 1\text{ms}$	$I_{FSM}$	1	A
at $t = 1\text{s}$	$I_{FSM}$	0.5	A
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	$P_{tot}$	500	mW
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-65 to +200	$^\circ\text{C}$



## SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 550-1559-04-002-04

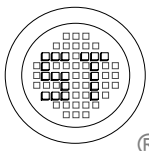
Dated : 25/10/2002

# 1N4531, 1N4532

## Characteristics at $T_j = 25^\circ\text{C}$

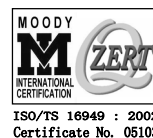
		Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 10\text{mA}$		$V_F$	-	-	1000	mV
Reverse Current at $V_R = 20\text{V}$ at $V_R = 50\text{V}$ at $V_R = 20\text{V}, T_j = 150^\circ\text{C}$ at $V_R = 50\text{V}, T_j = 150^\circ\text{C}$	1N4531	$I_R$	-	-	25	nA
	1N4532	$I_R$	-	-	100	nA
	1N4531	$I_R$	-	-	50	$\mu\text{A}$
	1N4532	$I_R$	-	-	100	$\mu\text{A}$
Diode Capacitance at $f = 1\text{MHz}$	1N4531	$C_d$	-	-	4	pF
	1N4532	$C_d$	-	-	2	pF
Reverse Recovery Time at $I_F = 10\text{mA}, I_R = 60\text{mA}, R_L = 100\Omega$ at $I_F = 10\text{mA}, I_R = 10\text{mA}, R_L = 100\Omega$	1N4531	$t_{rr}$	-	-	4	ns
	1N4532	$t_{rr}$	-	-	2	ns
	1N4532	$t_{rr}$	-	-	4	ns
Forward Recovery Voltage at $I_F = 100\text{mA}, t_r \leq 30\text{ns}$		$V_{fr}$	-	-	3	V
Thermal Resistance from Junction to tie-point at lead length 5mm		$R_{thjtp}$	-	-	120	K/W
Thermal Resistance from Junction to ambient at lead length 5mm (Note 1)		$R_{thja}$	-	-	350	K/W

Note: 1. Device mounted on a printed circuit-board without metallization pad.



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