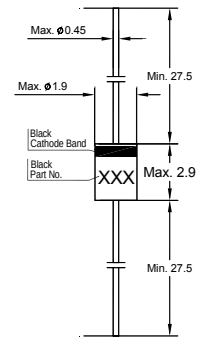


1N4531, 1N4532

SILICON EPITAXIAL PLANAR DIODES

Fast Switching Diode



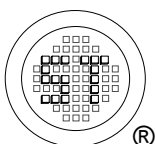
Glass Case DO-34
Dimensions in mm

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

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

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\ \text{mA}$	V_F	1	V
Reverse Current	I_R	25	nA
at $V_R = 20\ \text{V}$ 1N4531			
at $V_R = 50\ \text{V}$ 1N4532		100	nA
at $V_R = 20\ \text{V}$, $T_j = 150^\circ\text{C}$ 1N4531		50	μA
at $V_R = 50\ \text{V}$, $T_j = 150^\circ\text{C}$ 1N4532		100	μA
Diode Capacitance	C_d	4	pF
at $f = 1\ \text{MHz}$ 1N4531			
	C_d	2	pF
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = 10\ \text{mA}$, $I_R = 60\ \text{mA}$, $R_L = 100\ \Omega$ 1N4531			
		2	ns
at $I_F = 10\ \text{mA}$, $I_R = 10\ \text{mA}$, $R_L = 100\ \Omega$ 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 Ambient	R_{thJA}	350	K/W



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

Dated : 23/06/2007