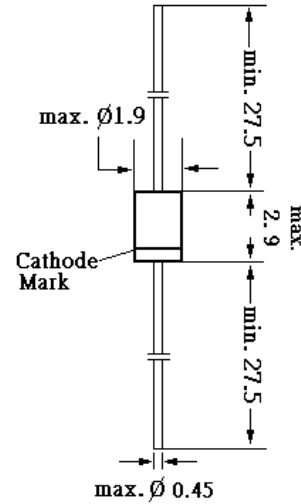


1SS270A

SILICON EPITAXIAL PLANAR HIGH SPEED SWITCHING DIODE

Features

- Low capacitance. ($C=3.0\text{pF max.}$)
- Short reverse recovery time. ($t_{rr} = 3.5\text{ns max.}$)
- High reliability.



Glass case JEDEC DO-34

Dimensions in mm

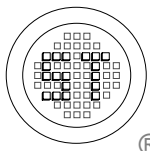
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Peak Reverse Voltage	V_{RM}	70	V
Reverse Voltage	V_R	60	V
Peak Forward Current	I_{FM}	450	mA
Average Forward Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current (Note 1)	I_{FSM}	1	A
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^\circ\text{C}$

Note 1 : Within 1s forward surge current.

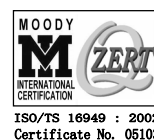
Characteristics at $T_{amb} = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward Voltage	V_F	-	-	0.8	V	$I_F = 10\text{mA}$
Reverse Current	I_R	-	-	1.0	μA	$V_R = 60\text{V}$
Capacitance Between Terminals	C_T	-	-	3.0	pF	$V_R = 1\text{V}, f = 1\text{MHz}$
Reverse Recovery Time	t_{rr}	-	-	3.5	ns	$V_R = 6\text{V}, I_F = 10\text{mA}, R_L = 50\Omega$



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. 550-159-04-002-04

Dated : 08/11/2004

1SS270A

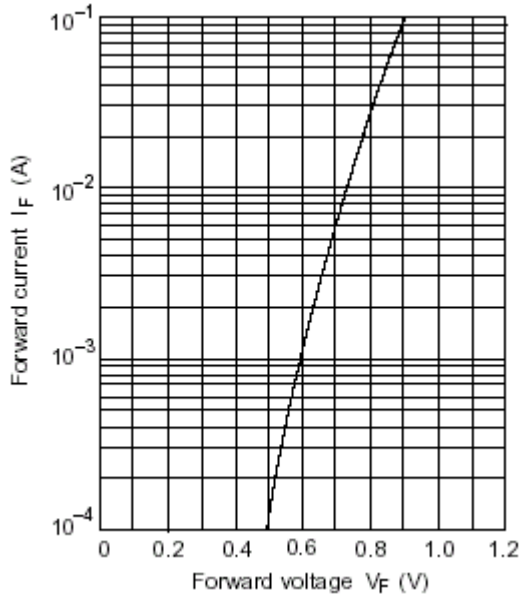


Fig.1 Forward current Vs. Forward voltage

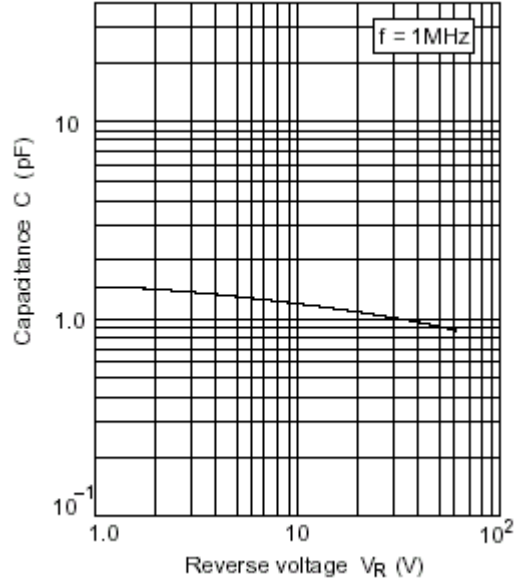
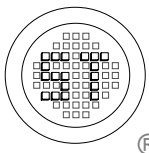
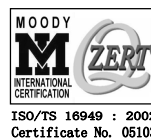


Fig.2 Capacitance Vs. Reverse voltage



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