

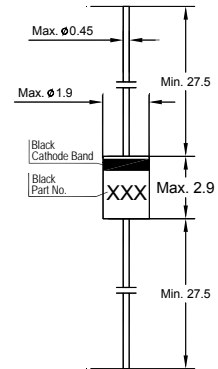
# 1SS270A

## SILICON EPITAXIAL PLANAR DIODE

for high speed switching

### Features

- Low capacitance
- Short reverse recovery time
- High reliability



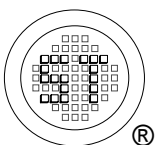
Glass Case DO-34  
Dimensions in mm

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

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

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	$V_F$	0.8	V
Reverse Current at $V_R = 60\text{ V}$	$I_R$	1	$\mu\text{A}$
Capacitance between Terminals at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 50\text{ }\Omega$	$t_{rr}$	3.5	ns



**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

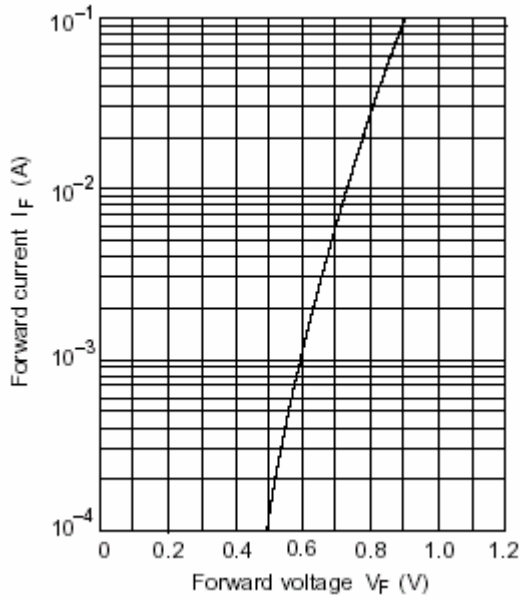


ISO 14001:2004  
Certificate No. 7116

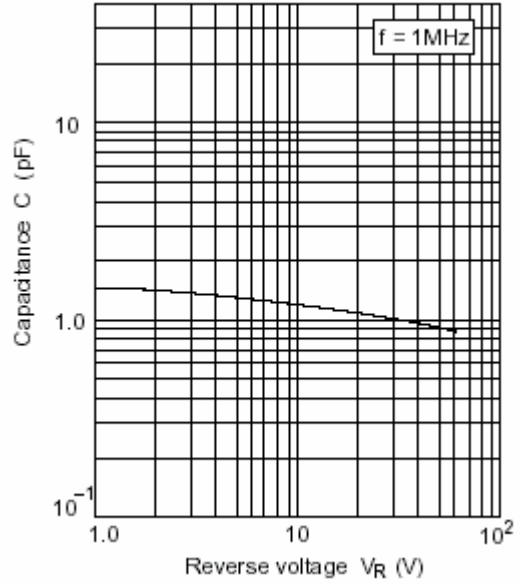


ISO 9001:2000  
Certificate No. 0506088

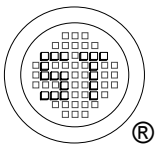
Dated : 25/06/2007



**Fig.1 Forward current Vs. Forward voltage**



**Fig.2 Capacitance Vs. Reverse voltage**



**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. 0506088