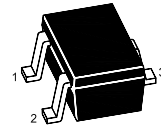
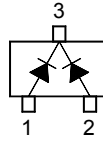


# 1SS301CCW

## SILICON EPITAXIAL PLANAR DIODE

### Applications

- Ultra high speed switching



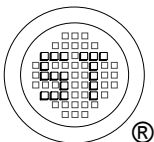
SOT-323 Plastic Package  
Marking Code: **PH**

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

Parameter	Symbol	Value	Unit
Maximum (Peak) Reverse Voltage	$V_{RM}$	85	V
Reverse Voltage	$V_R$	80	V
Average Forward Current	$I_O$	100	mA
Maximum (Peak) Forward Current	$I_{FM}$	300	mA
Peak Forward Surge Current ( $t_p = 10\text{ ms}$ )	$I_{FSM}$	2	A
Total Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	-	1.2	V
Reverse Current at $V_R = 30\text{ V}$ at $V_R = 80\text{ V}$	$I_R$	- -	0.1 0.5	$\mu\text{A}$
Total Capacitance at $V_R = 0$ , $f = 1\text{ MHz}$	$C_T$	-	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $I_{rr} = 1\text{ mA}$ , $R_L = 100\text{ }\Omega$	$t_{rr}$	-	4	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



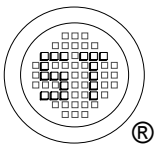
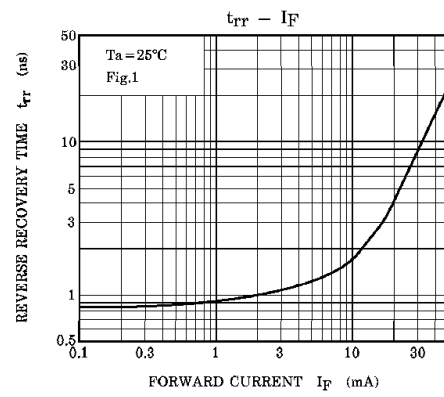
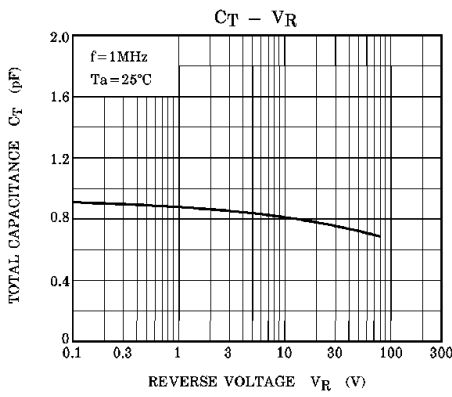
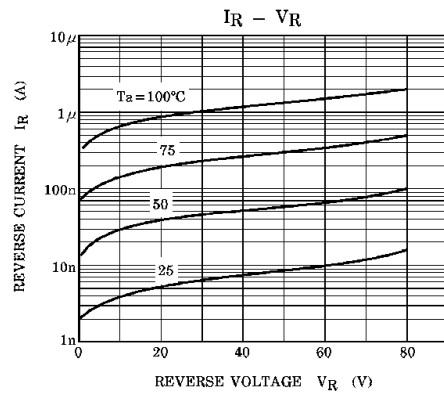
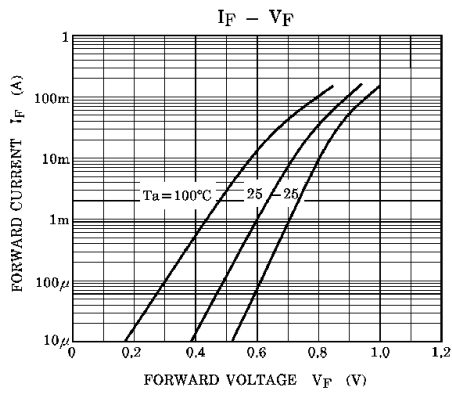
ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 10/10/2008

# 1SS301CCW



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