

1SS510WT

SILICON EPITAXIAL PLANAR DIODE

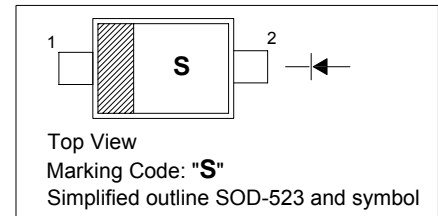
Band Switching Diode

Applications

- For VHF tuner band RF attenuator
- AGC for FM tuner

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

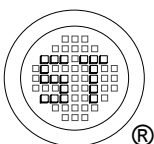


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	50	V
Forward Current	I_F	50	mA
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage at $I_R = 10\text{ }\mu\text{A}$	V_R	50	-	-	V
Reverse Current at $V_R = 50\text{ V}$	I_R	-	-	0.1	μA
Total Capacitance at $V_R = 50\text{ V}$, $f = 1\text{ MHz}$	C_T	-	0.25	-	pF
Series Resistance at $I_F = 5\text{ mA}$, $f = 100\text{ MHz}$	r_s	-	1.5	-	Ω



SEMTECH ELECTRONICS LTD.

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



Dated : 23/11/2006

Fig. 1 $I_C - T_a$

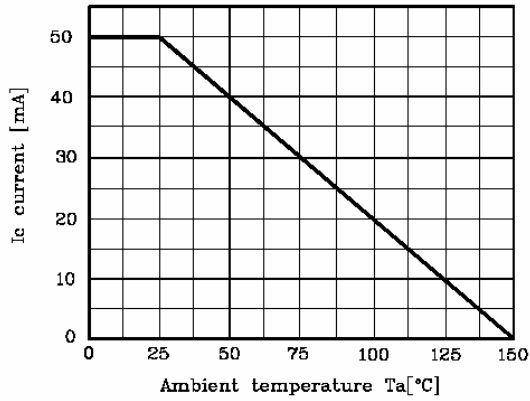


Fig. 2 $I_F - V_F$

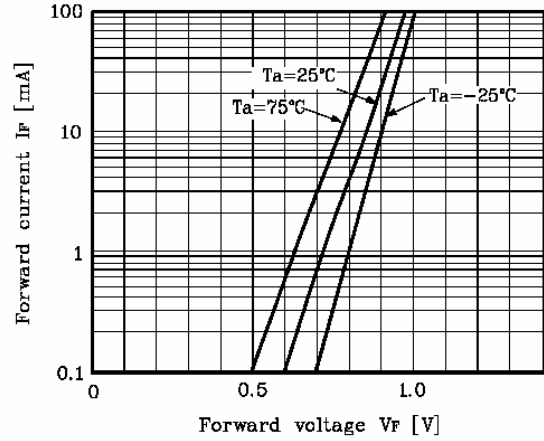


Fig. 3 $C_T - V_R$

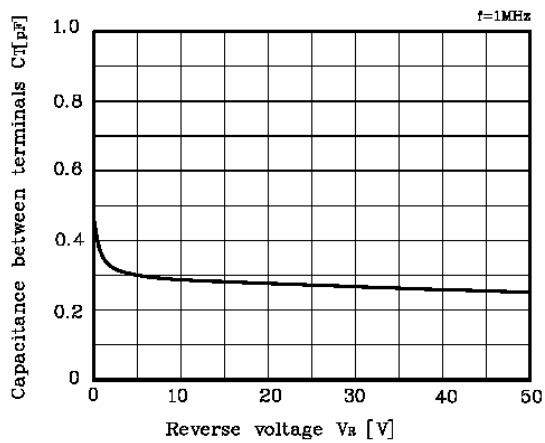
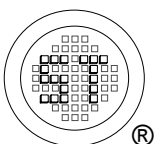
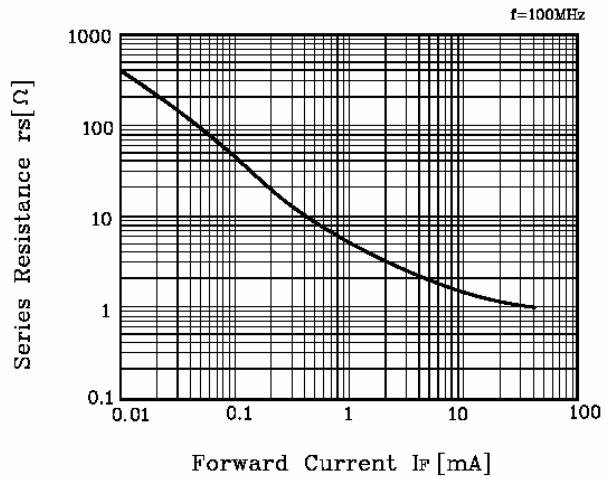


Fig. 4 $r_s - I_F$



SEMTECH ELECTRONICS LTD.

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



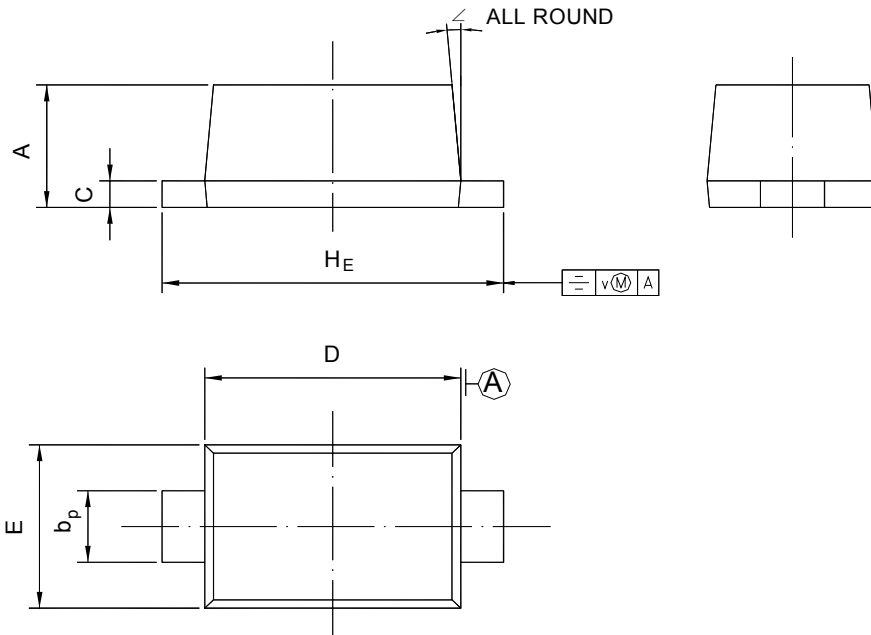
ISO/TS 16949 : 2002 Certificate No. 05103 ISO 14001:2004 Certificate No. 7116 ISO 9001:2000 Certificate No. 0506098

1SS510WT

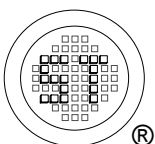
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company
 listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 23/11/2006