

1PS14SE

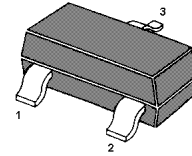
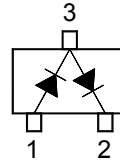
Silicon Epitaxial Planar PIN Diode

Features

- Low forward resistance
- Low capacitance

Applications

- for high frequency attenuator



Marking Code: H6
SOT-23 Plastic Package

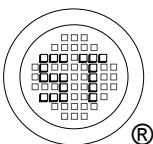
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	50	V
Continuous Forward Current	$I_{F(AV)}$	50	mA
Total Power Dissipation	P_{tot}	100	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 50\text{ mA}$	V_F	-	1	V
Reverse Current at $V_R = 50\text{ V}$	I_R	-	100	nA
Total Capacitance at $V_R = 50\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	0.35	pF
Forward Resistance at $I_F = 10\text{ mA}$, $f = 100\text{ MHz}$	r_f	-	7	Ω
ESD-Capability ¹⁾ at $C = 200\text{ pF}$, Both Forward and Reverse Direction 1 pulse	-	200	-	V

¹⁾ Failure criterion: $I_R \geq 200\text{ nA}$ at $V_R = 50\text{ V}$



SEMTECH ELECTRONICS LTD.
Subsidiary of Sino-Tech International (BVI) Limited



Dated: 04/07/2012 Rev: 02

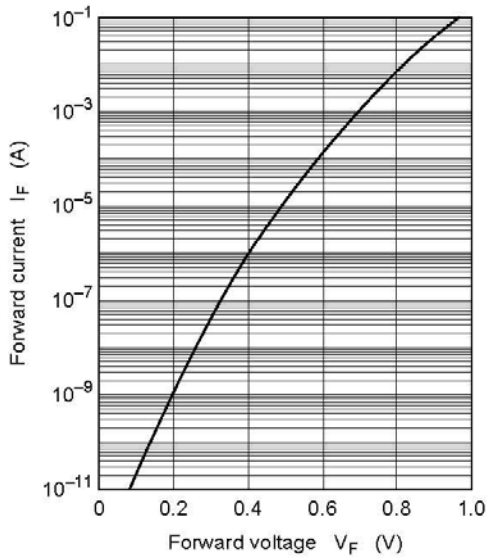


Fig.1 Forward current vs. Forward voltage

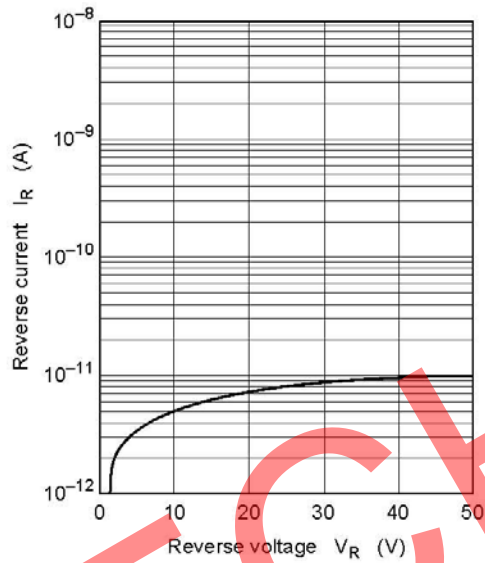


Fig.2 Reverse current vs. Reverse voltage

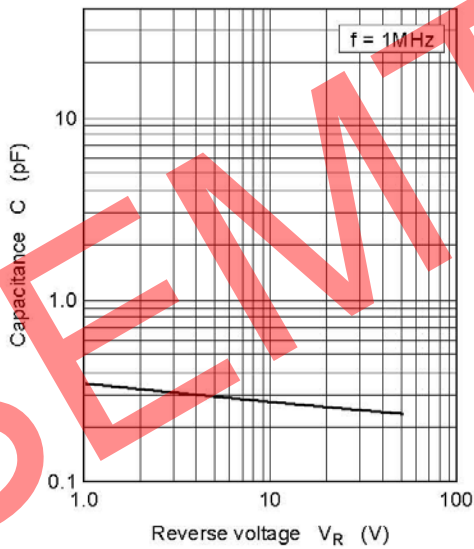


Fig.3 Capacitance vs. Reverse voltage

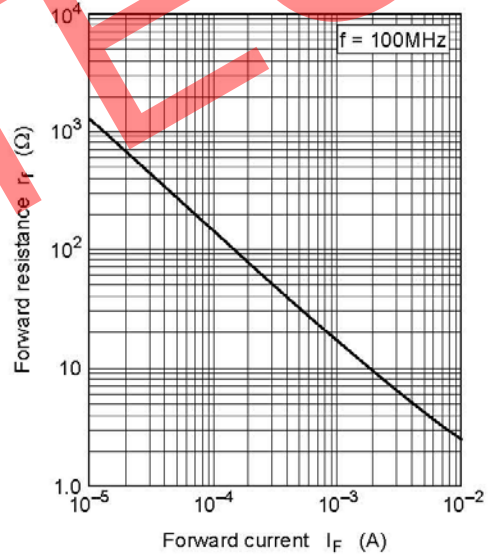
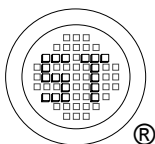


Fig.4 Forward resistance vs. Forward current



SEMTECH ELECTRONICS LTD.
Subsidiary of Sino-Tech International (BVI) Limited

