

# 1PS14SE

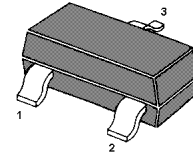
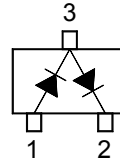
## Silicon Epitaxial Planar PIN Diode

### 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	$\Omega$
ESD-Capability <sup>1)</sup> at $C = 200\text{ pF}$ , Both Forward and Reverse Direction 1 pulse	-	200	-	V

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

**TOP DYNAMIC**



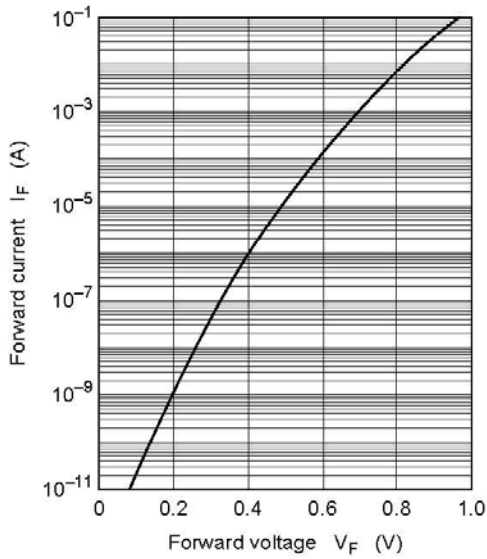


Fig.1 Forward current vs. Forward voltage

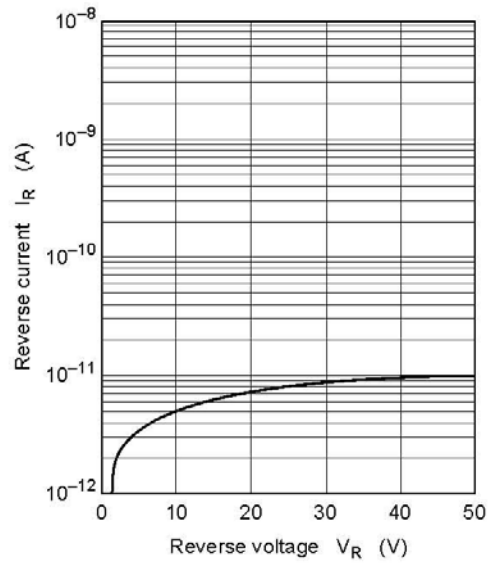


Fig.2 Reverse current vs. Reverse voltage

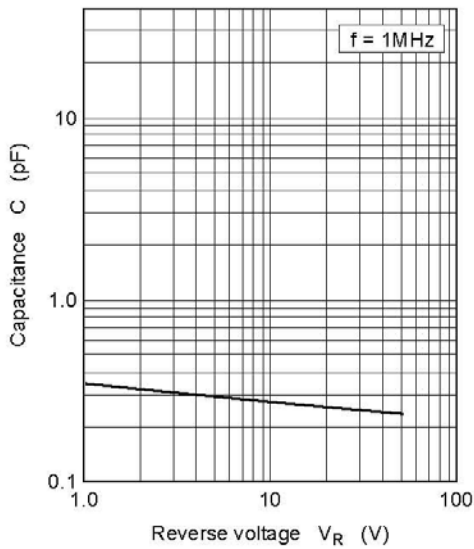


Fig.3 Capacitance vs. Reverse voltage

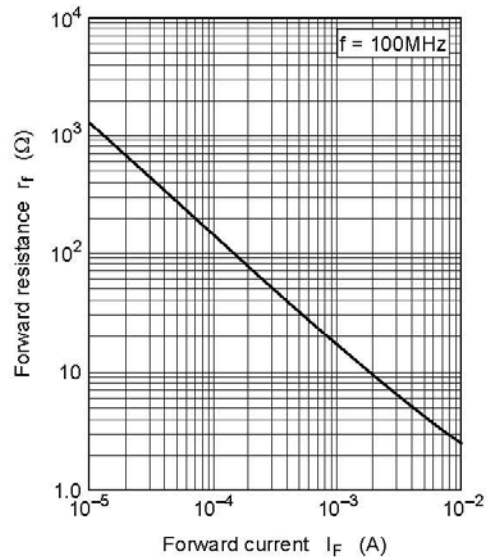


Fig.4 Forward resistance vs. Forward current