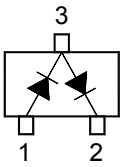
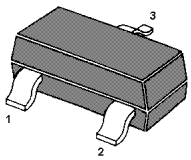
1PS14SE

Silicon Epitaxial Planar PIN Diode

Features

- Low forward resistance
- Low capacitance





Marking Code: **H6**
TO-236 Plastic Package

Applications

- for high frequency attenuator

Absolute Maximum Ratings (T_a = 25 °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	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

Characteristics at T_a = 25 °C

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

[1)] Failure criterion: $I_R \geq 200$ nA at V_R = 50 V

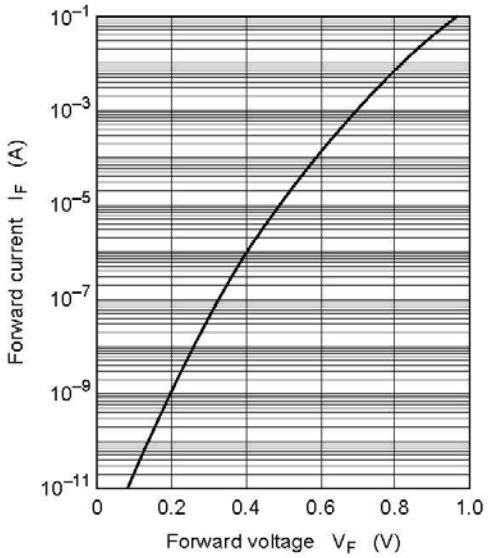


Fig.1 Forward current vs. Forward voltage

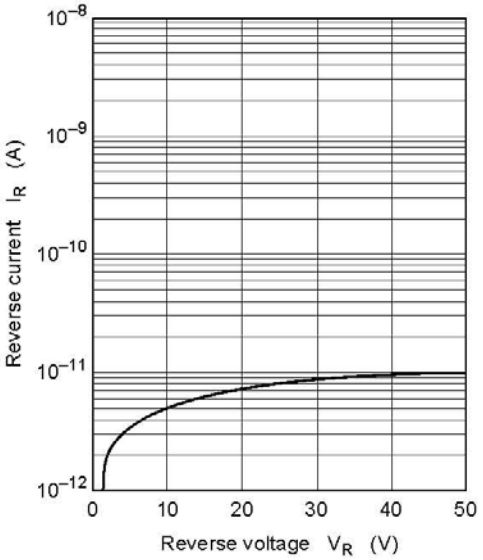


Fig.2 Reverse current vs. Reverse voltage

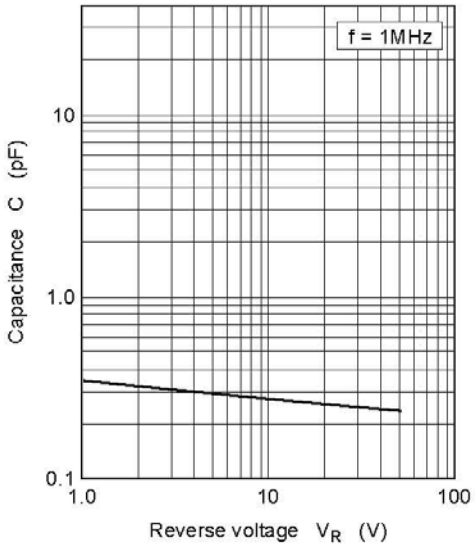


Fig.3 Capacitance vs. Reverse voltage

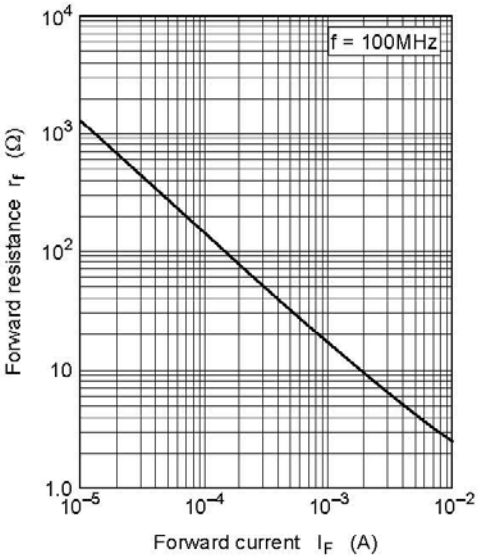


Fig.4 Forward resistance vs. Forward current