

HVM306 Silicon Epitaxial Planar Diode for Lowpass Circuit

HITACHI

Preliminary
Rev. 1
Jun. 1992

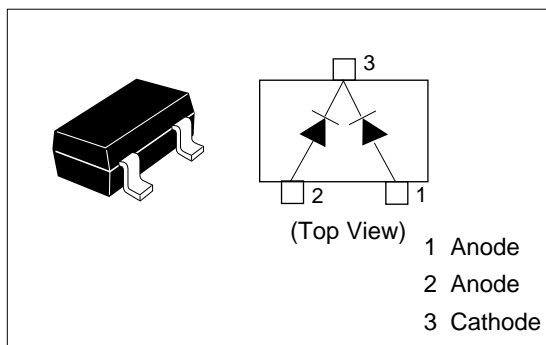
Features

- High capacitance ratio. (n=10min)
- Low series resistance.
- Low cost.
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVM306	T 9	MPAK

Pin Arrangement

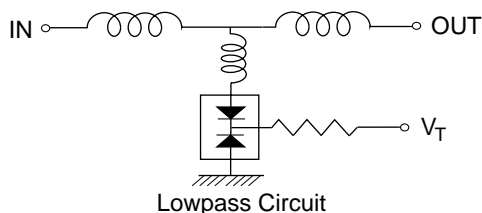


Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	30	V
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_{R(1)}$	—	—	10	nA	$V_R = 30\text{ V}$
	$I_{R(2)}$	—	—	100		$V_R = 30\text{ V}, T_a = 60\text{ °C}$
Capacitance	C_2	29.4	—	34.3	pF	$V_R = 2\text{ V}, f = 1\text{ MHz}$
	C_{25}	2.67	—	3.02		$V_R = 25\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	10.0	—	—	—	C_2/C_{25}
Series resistance	r_s	—	—	0.75	Ω	$C = 9\text{ pF}, f = 470\text{ MHz}$



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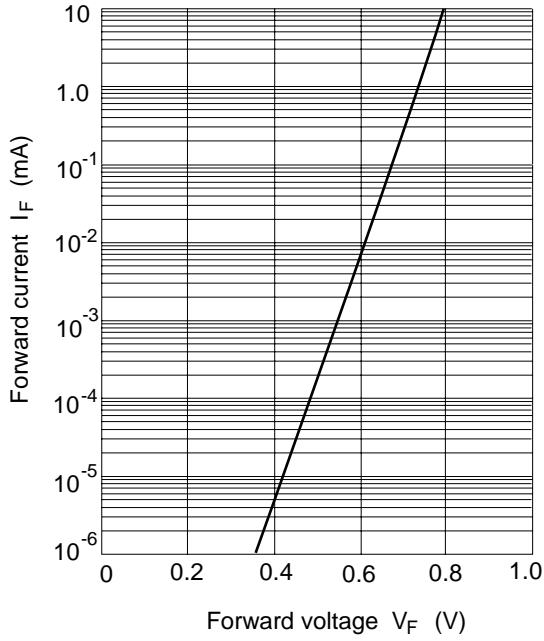


Fig.1 Forward current Vs. Forward voltage

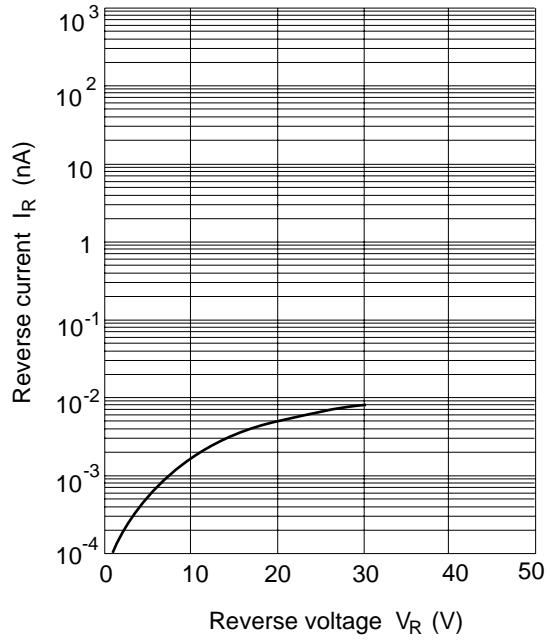


Fig.2 Reverse current Vs. Reverse voltage

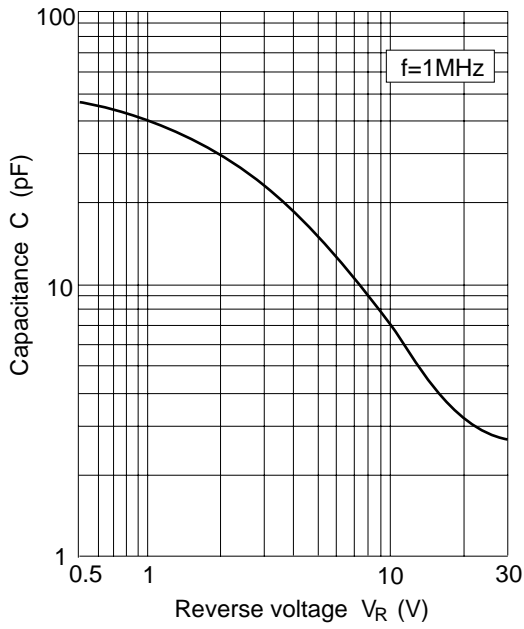


Fig.3 Capacitance Vs. Reverse voltage

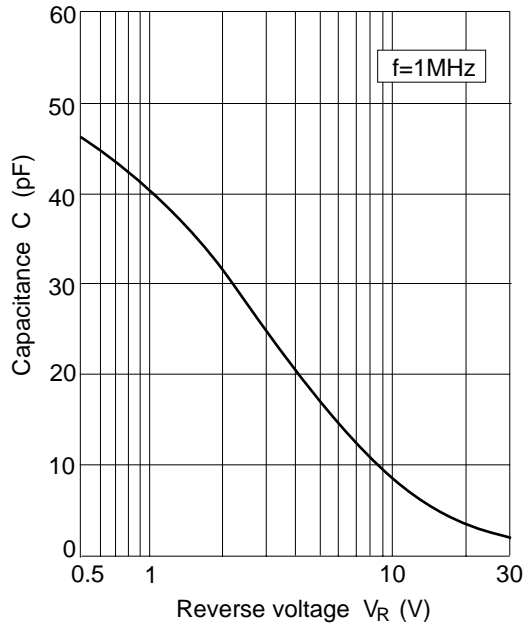


Fig.4 Capacitance Vs. Reverse voltage

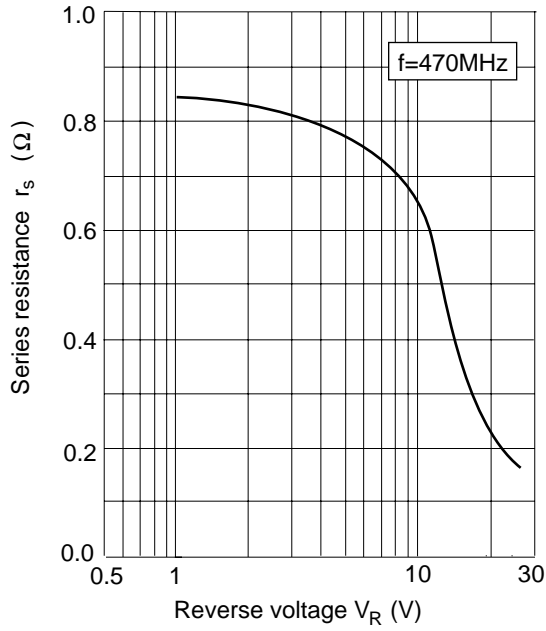


Fig.5 Series resistance Vs. Reverse voltage

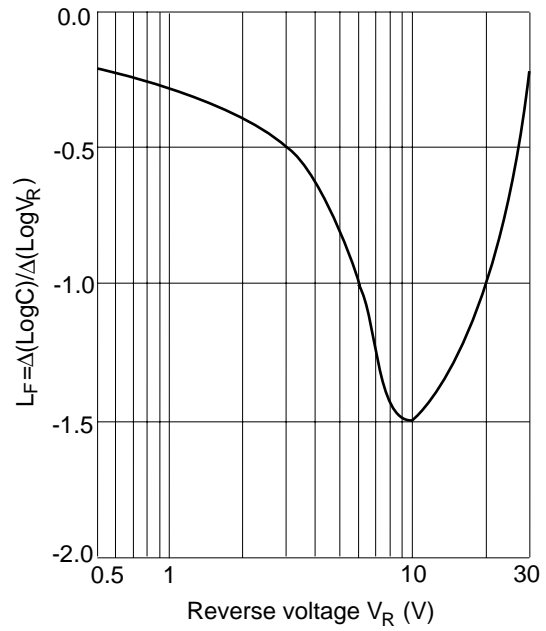
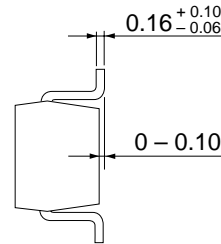
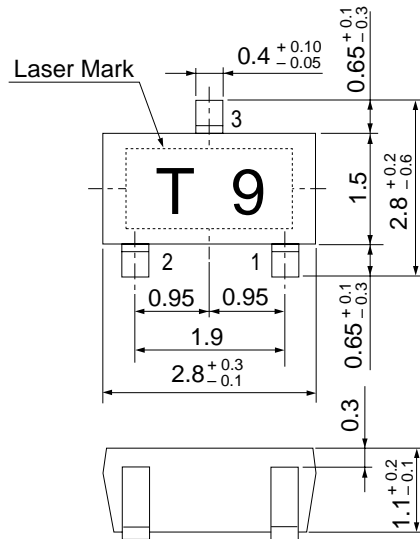


Fig.6 Linearity factor Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Anode
- 2 Anode
- 3 Cathode

HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011