HVB350BYP

Variable Capacitance Diode for VCO

HITACHI

ADE-208-1420 (Z)

Rev. 0
May 2001

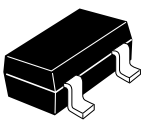
Features

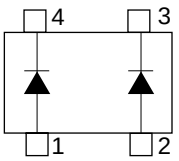
- High capacitance ratio. (n = 2.8 min)
- Low series resistance. (rs = 0.5 max)
- Good C-V linearity.
- CMPAK-4 Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

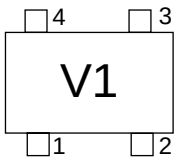
Type No.	Laser Mark	Package Code
HVB350BYP	V1	CMPAK-4

Pin Arrangement





(Top View)



(Top View)

1. Anode
2. Anode
3. Cathode
4. Cathode

Hitachi semiconductor

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Electrical Characteristics *[1]

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_{R1}	—	—	10	nA	V_R = 15 V
	I_{R2}	—	—	100		V_R = 15 V, Ta = 60°C
Capacitance	C_1	15.5	—	17.0	pF	V_R = 1 V, f = 1 MHz
	C_4	5.0	—	6.0		V_R = 4 V, f = 1 MHz
Capacitance ratio	n	2.8	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	0.5	Ω	V_R = 1 V, f = 470 MHz

Note: 1. Per one device.

Main Characteristic

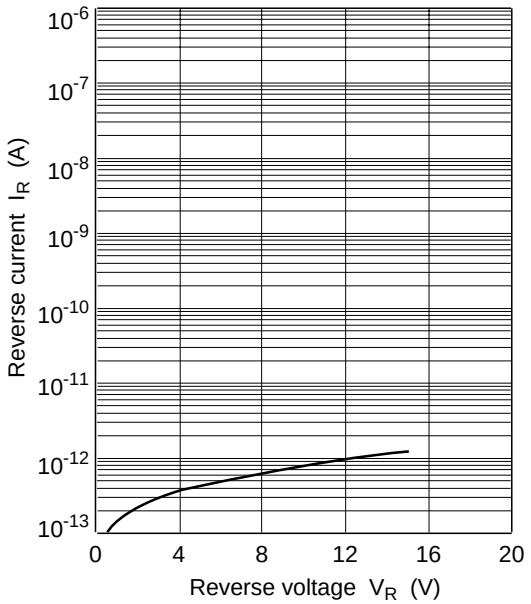


Fig.1 Reverse current vs. Reverse voltage

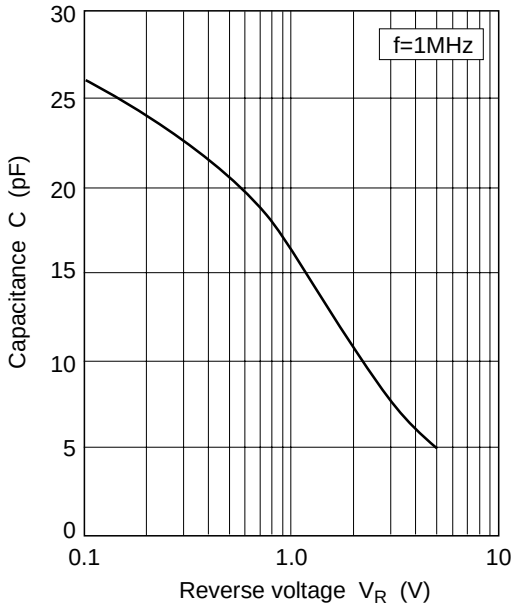


Fig.2 Capacitance vs. Reverse voltage

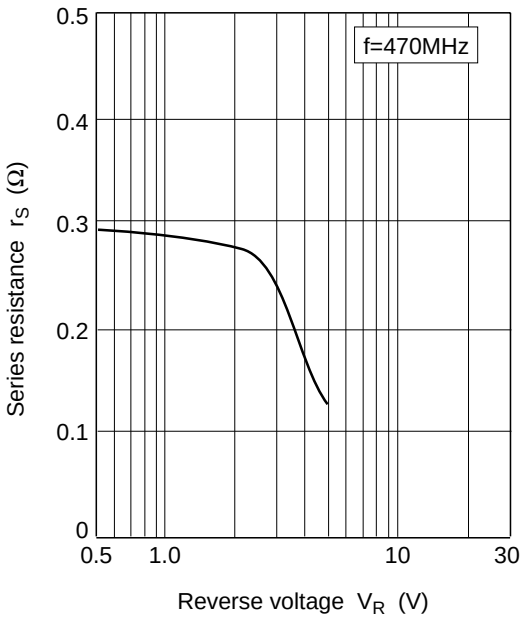


Fig.3 Series resistance vs. Reverse voltage

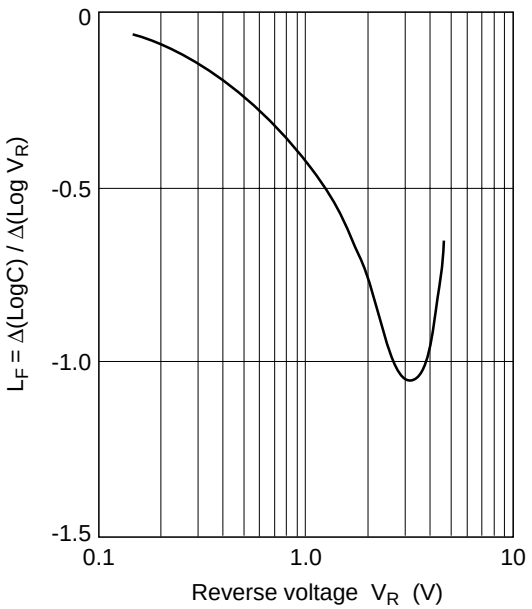
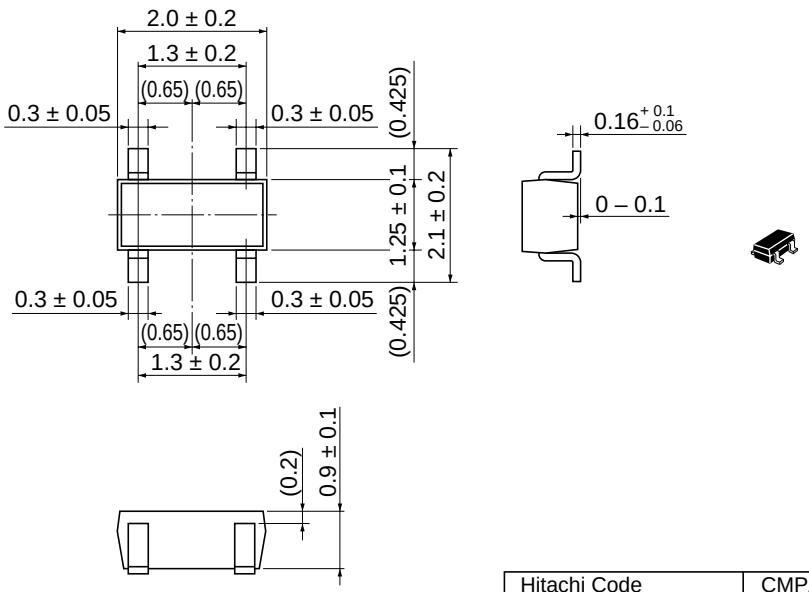


Fig.4 L_F vs. Reverse voltage

Package Dimensions

As of January, 2001

Unit: mm



Hitachi Code	CMPAK-4
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.006 g

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