

HVM28BWK

Variable Capacitance Diode for VCO

HITACHI

ADE-208-1219 (Z)

Rev.0
Jul. 2001

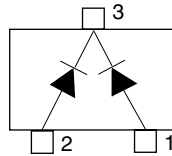
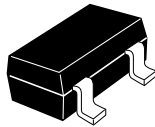
Features

- High capacitance ratio. ($n = 1.8 \text{ min}$)
- To be usable at low voltage.
- Low series resistance. ($r_s = 0.5 \text{ max}$)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVM28BWK	T14	MPAK

Pin Arrangement



(Top View)

1. Anode
2. Anode
3. Cathode

Absolute Maximum Ratings *1

(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

Note: 1. Per one device.

Electrical Characteristics *1

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_{R1}	—	—	50	nA	$V_R = 10\text{ V}$
	I_{R2}	—	—	200		$V_R = 10\text{ V}, T_a = 65^\circ\text{C}$
Capacitance	C_1	68.0	—	72.0	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	C_2	34.0	—	38.0		$V_R = 2\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	1.8	—	—	—	C_1 / C_2
Series resistance	r_s	—	—	0.5	Ω	$V_R = 1\text{ V}, f = 100\text{ MHz}$

Note: 1. Per one device.

Main Characteristic

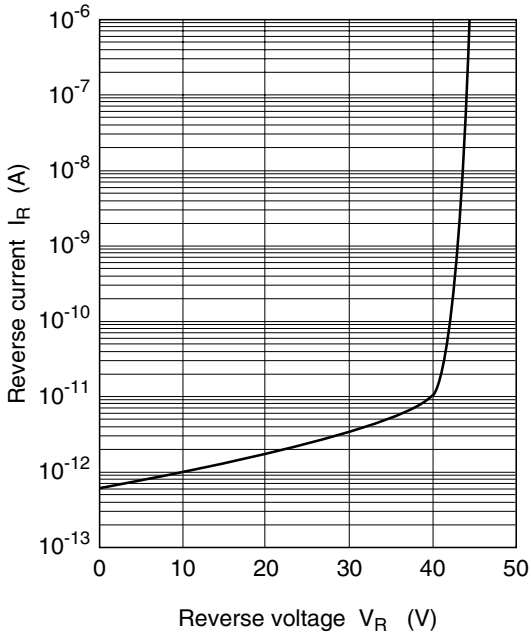


Fig.1 Reverse current vs. Reverse voltage

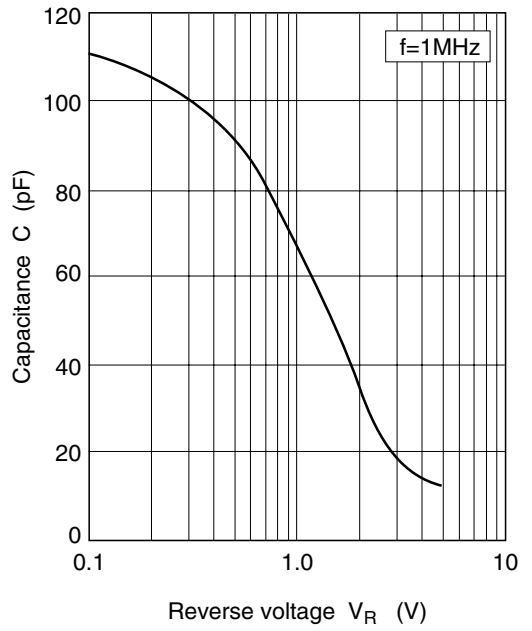


Fig.2 Capacitance vs. Reverse voltage

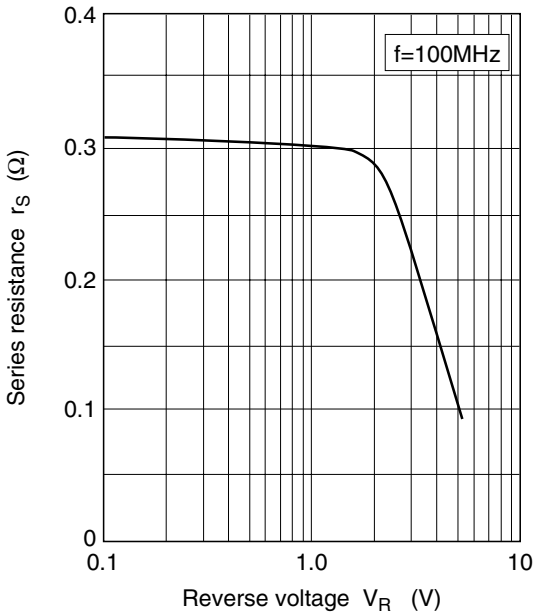


Fig.3 Series resistance vs. Reverse voltage

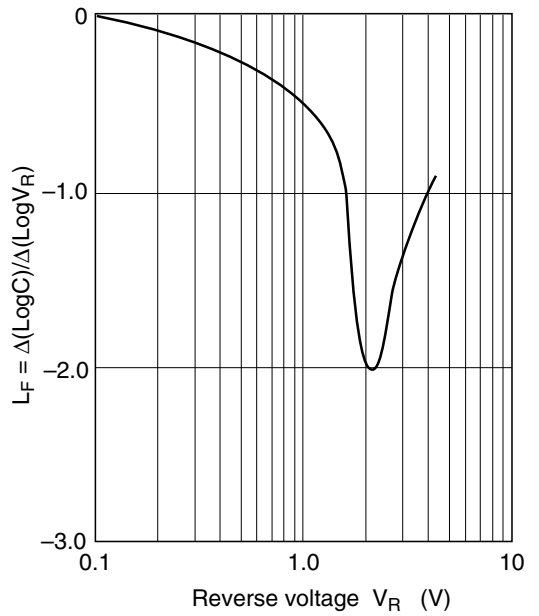
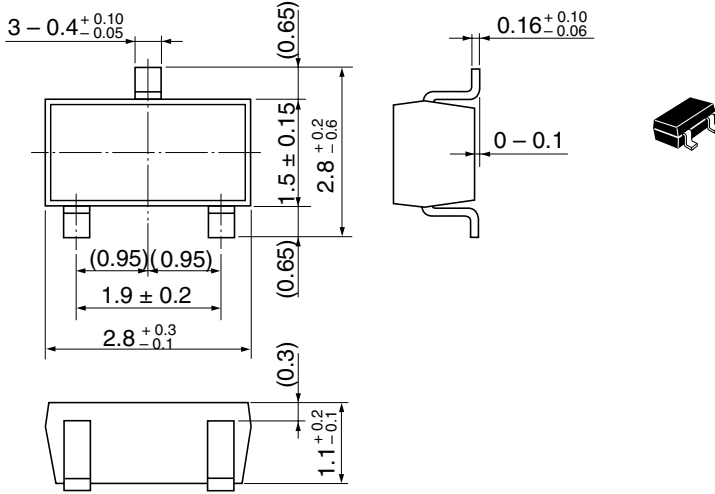


Fig.4 L_F vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.011 g

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