

ADE-208-174A(Z)

# HVK89

## Silicon Epitaxial Planar Diode for UHF/VHF TV tuner AFC

# HITACHI

Rev. 1  
Jun. 1994

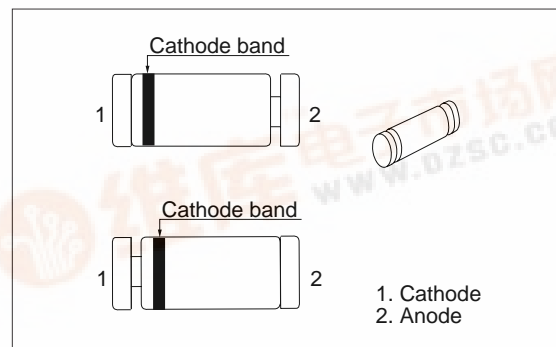
### Features

- High capacitance ratio. ( $n = 2.5$  to  $3.4$ )
- Low series resistance. ( $r_s = 1.3\Omega$  max)
- LLD package is suitable for high density surface mounting and high speed assembly.

### Ordering Information

Type No.	Cathode Band	Package code
HVK89	Black	LLD

### Outline



### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

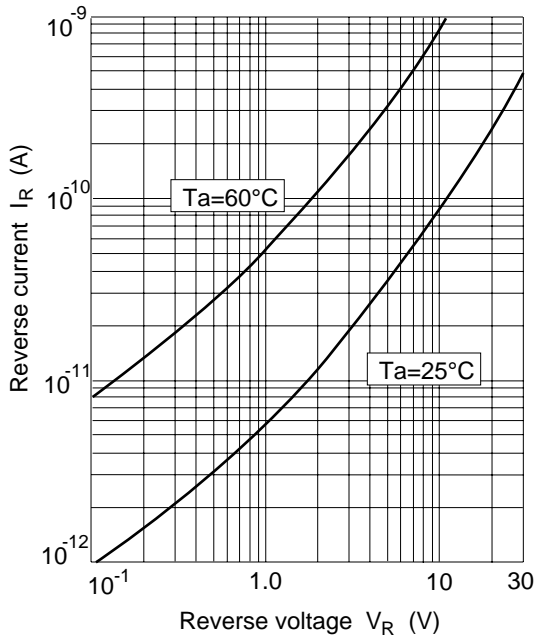
Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	34	V
Reverse voltage	$V_R$	32	V
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

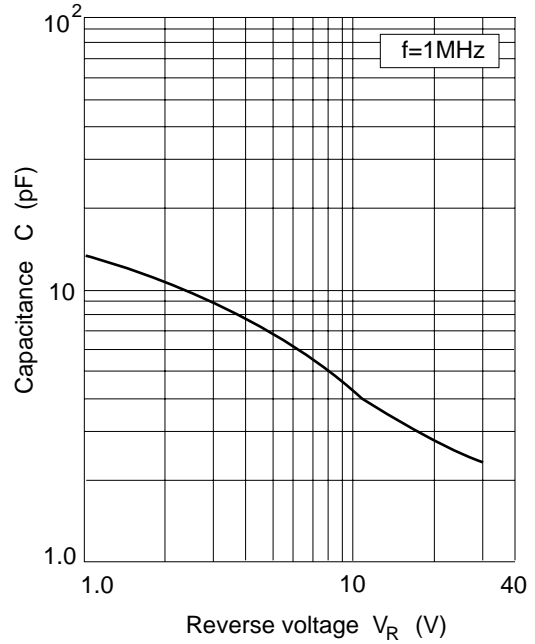
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_R$	—	—	10.0	nA	$V_R = 25\text{ V}$
Capacitance	$C_2$	10.5	—	16.0	pF	$V_R = 2\text{ V}, f = 1\text{ MHz}$
	$C_{10}$	3.3	—	5.7		$V_R = 10\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	$n^*$	2.5	—	3.4	—	$C_2/C_{10}$
Series resistance	$r_s$	—	—	1.3	$\Omega$	$C = 12.5\text{ pF}, f = 50\text{ MHz}$

\* The HVK89 is grouped by  $n$  as follows.  
 HVK89A :  $n = 2.5$  to  $3.0$   
 HVK89B :  $n = 2.8$  to  $3.4$

# HVK89



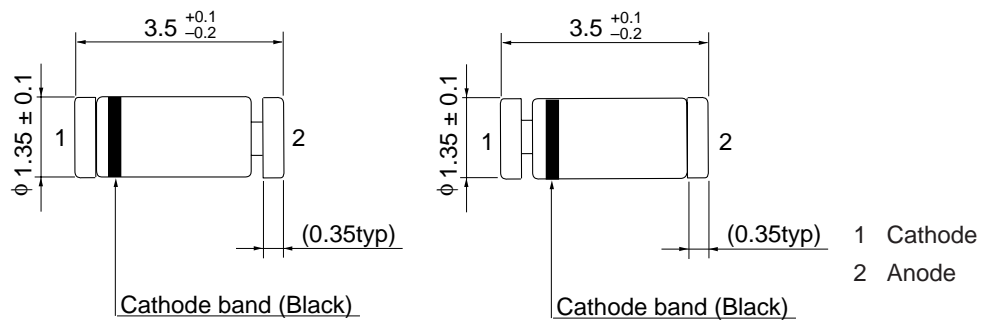
**Fig.1 Reverse current Vs. Reverse voltage**



**Fig.2 Capacitance Vs. Reverse voltage**

## Package Dimensions

Unit: mm



( ) : Reference only

HITACHI Code	LLD
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.027