

HVK89

Silicon Epitaxial Planar Diode for UHF/VHF TV tuner AFC

HITACHI

Rev. 1
Jun. 1994

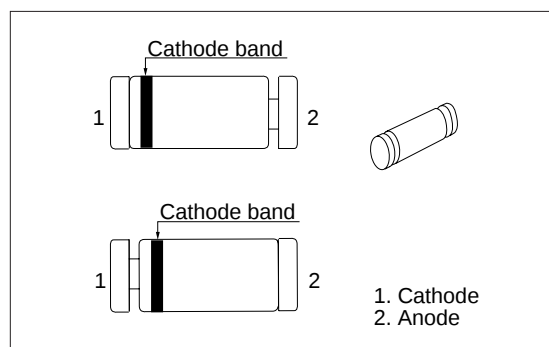
Features

- 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	Ω	$C = 12.5\text{ pF}, f = 50\text{ MHz}$

* The HVK89 is grouped by n as follows.

HVK89A : $n = 2.5$ to 3.0

HVK89B : $n = 2.8$ to 3.4

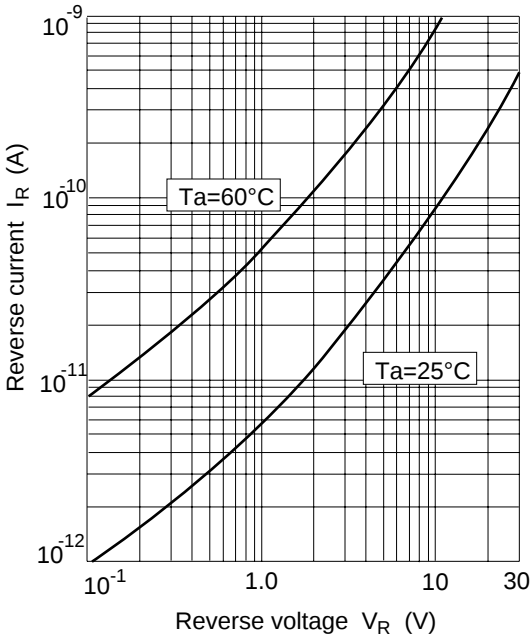


Fig.1 Reverse current Vs. Reverse voltage

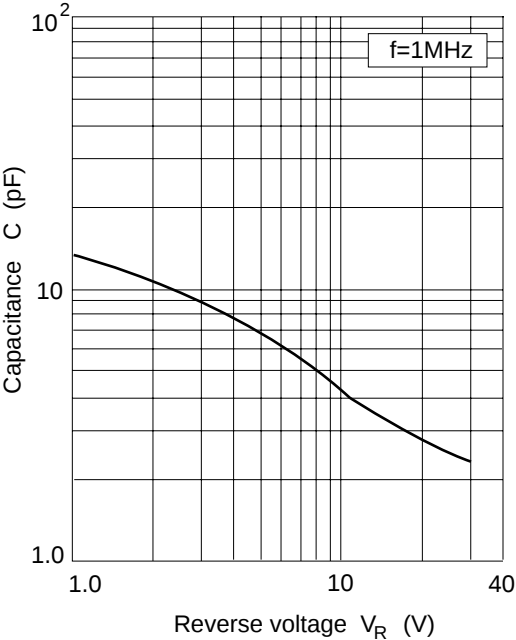
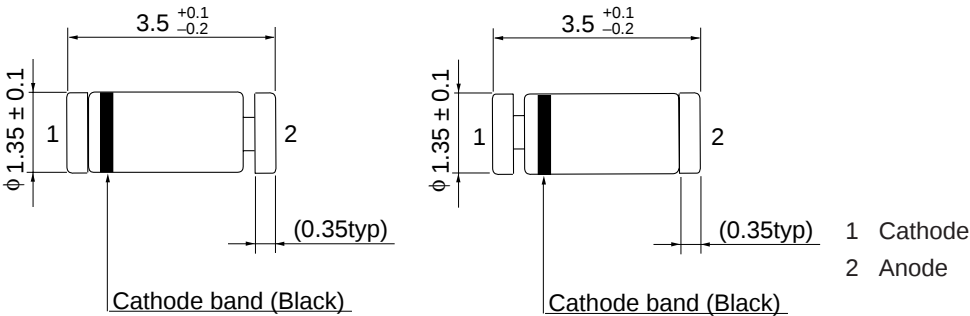


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



() : Reference only

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