

HVM17

Variable Capacitance Diode for FM tuner

HITACHI

Preliminary
Rev. 2
May. 1993

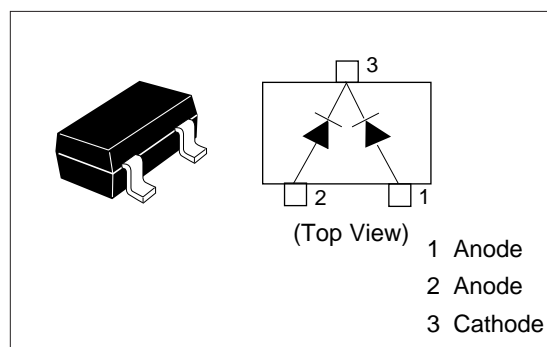
Features

- Good linearity of C-V curve.
- To be usable at low voltage.
- High figure of merit. (Q=50 min)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVM17	T 6	MPAK

Pin Arrangement



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	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 voltage	V_R	15	—	—	V	$I_R = 10 \mu A$
Reverse current	I_R	—	—	100	nA	$V_R = 9 V$
Capacitance	C_1	50.0	—	85.0	pF	$V_R = 1 V, f = 1 MHz$
	C_3	16.1	—	27.3		$V_R = 3 V, f = 1 MHz$
	$C_{4.5}$	5.23	—	8.84		$V_R = 4.5V, f = 1 MHz$
Capacitance ratio	n	5.6	—	—	—	$C_1/C_{4.5}$
Figure of merit	Q	50	—	—	—	$V_R = 2.5V, f = 10 MHz$
ESD-Capability	—	80	—	—	V	*C= 200pF, Both forward and reverse direction 1 pulse.

* Failure criterion ; $I_R \geq 100nA$ at $V_R = 9V$

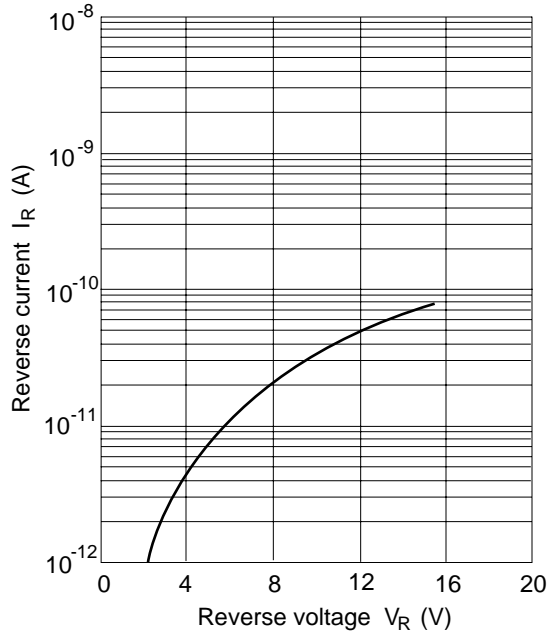


Fig.1 Reverse current Vs. Reverse voltage

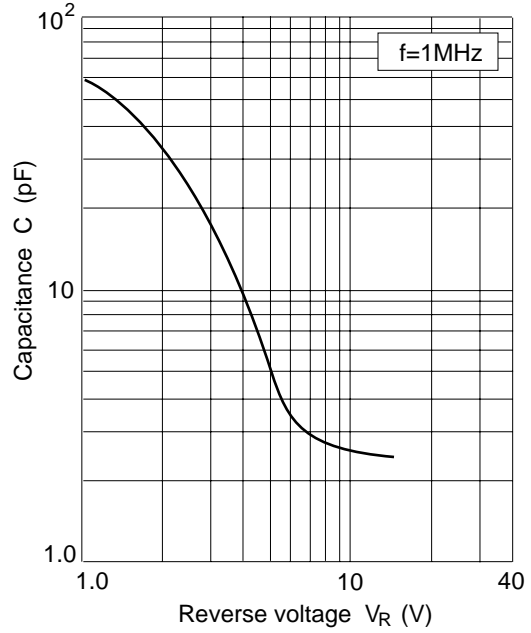
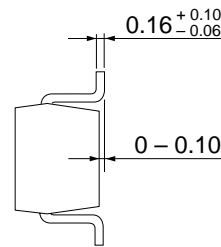
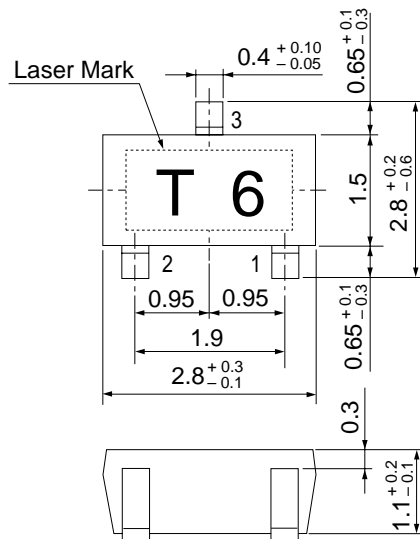


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Anode
- 2 Anode
- 3 Cathode

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