

HVM25

Variable Capacitance Diode for FM tuner

HITACHI

Preliminary
Rev. 2
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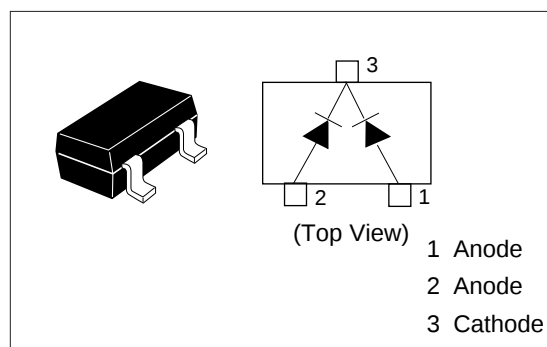
Features

- Good linearity of C-V curve.
- To be usable at low voltage.
- High figure of merit. (Q=60 min)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVM25	T 8	MPAK

Pin Arrangement



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	16	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	16	—	—	V	$I_R = 10 \mu A$
Reverse current	I_R	—	—	50	nA	$V_R = 10 V$
Capacitance	C_3	36.0	—	45.0	pF	$V_R = 3 V, f = 1 MHz$
	C_8	12.0	—	17.0		$V_R = 8 V, f = 1 MHz$
Capacitance ratio	n	2.5	—	—	—	C_3 / C_8
Figure of merit	Q	60	—	—	—	$V_R = 3 V, f = 100 MHz$
Matching error	$\Delta C/C^*$	—	—	3.0	%	$V_R = 3 \sim 8 V$

* A set of HVM25 is of uniform C-V characteristics.

Measure max. value and min. value of capacitance at each bias point of $V_R=3V$ through $8V$.

Calculate Matching Error, $\Delta C/C = \frac{(C_{max} - C_{min})}{C_{min}} \times 100 (\%)$

** Each group shall uniform a multiple of 3 diodes.

