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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

Cautions

Keep safety first in your circuit designs!

1. Renesas Technology Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage.

Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HVM16

Variable Capacitance Diode for FM tuner

RENESAS

ADE-208-086E (Z)

Rev. 5
Jul. 2000

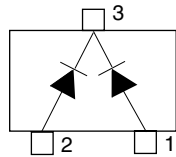
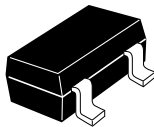
Features

- Worked by 8V, suitable for small manufacture sources of electric power.
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVM16	T3	MPAK

Pin Arrangement



(Top View)

- 1 Anode
- 2 Anode
- 3 Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	14	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Electrical Characteristics *

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	14.0	—	—	V	$I_R = 10 \mu A$
Reverse current	I_R	—	—	50.0	nA	$V_R = 9 V$
Capacitance	C_2	43.0	—	48.1	pF	$V_R = 2 V, f = 1 MHz$
	C_8	24.6	—	29.2		$V_R = 8 V, f = 1 MHz$
Capacitance ratio	n	1.65	—	1.75	—	C_2 / C_8
Figure of merit	Q	75	—	—	—	$V_R = 2 V, f = 100 MHz$

Note: Per one device.

Main Characteristic

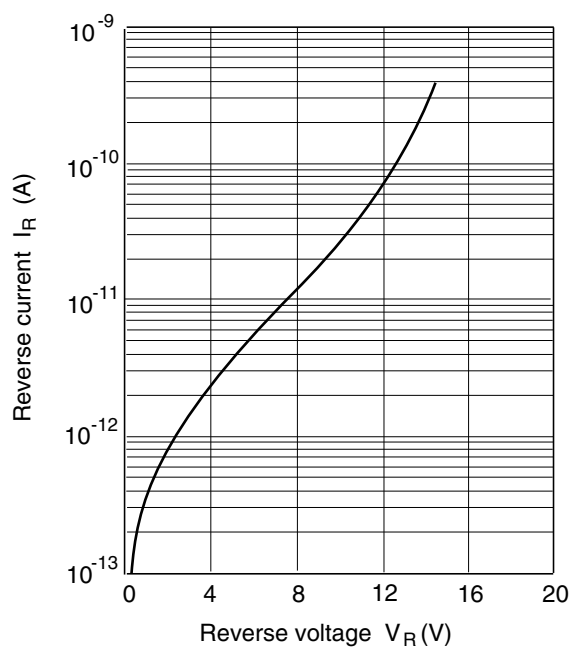


Fig.1 Reverse current Vs. Reverse voltage

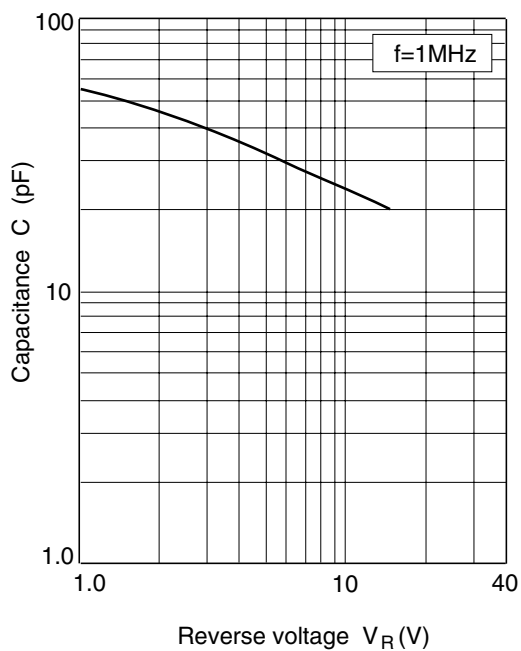
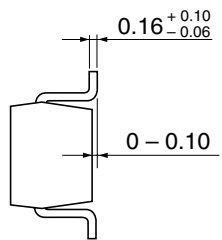
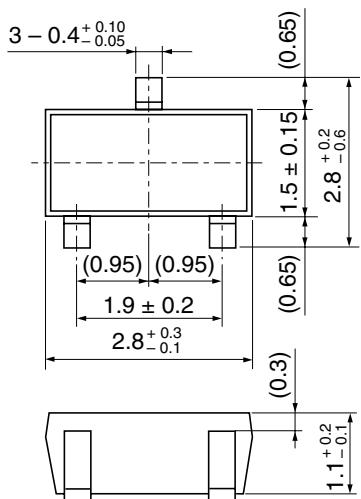


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



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

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