To all our customers

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

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HSB83YP

Silicon Epitaxial Planar Diode for High Voltage Switching

ADE-208-843(Z)

Rev. 0
Mar. 2000

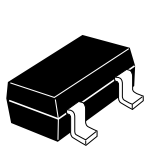
Features

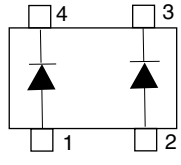
- High reverse voltage. (V_R=250V)
- CMPAK- 4 package which has two devices parallel connection, is suitable for high density surface mounting.

Ordering Information

Type No.	Laser Mark	Package Code
HSB83YP	F7	CMPAK-4

Pin Arrangement





(Top View)

1 Anode
2 Anode
3 Cathode
4 Cathode

Absolute Maximum Ratings*[2]

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	300	V
Reverse voltage	V_R	250	V
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}*[1]	2	A
Average rectified current	I_O	100	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note 1. Value at duration of 10msec.

Note 2. Two device total.

Electrical Characteristics*[1]

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	–	–	1.2	V	I_F = 100 mA
Reverse current	I_{R1}	–	–	0.2	µA	V_R = 250V
	I_{R2}	–	–	100		V_R = 300V
Capacitance	C	–	–	3.0	pF	V_R = 0V, f = 1 MHz
Reverse recovery time	t_{rr}	–	–	100	ns	I_F = I_R =30 mA, I_{rr} = 3mA, R_L= 100Ω

Note 1. Per one device.

Main Characteristic

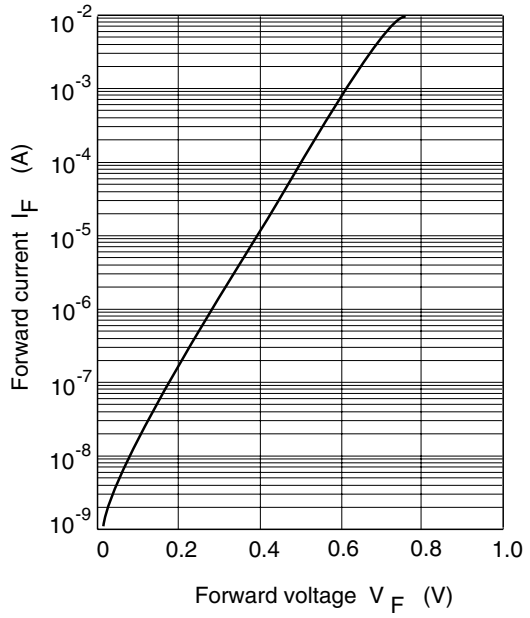


Fig.1 Forward current Vs. Forward voltage

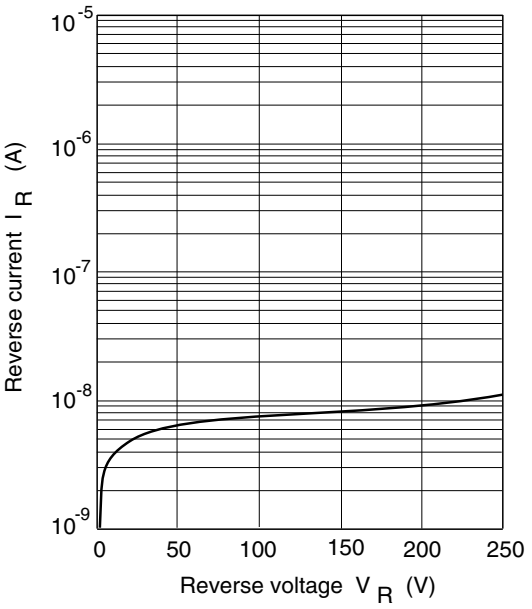


Fig.2 Reverse current Vs. Reverse voltage

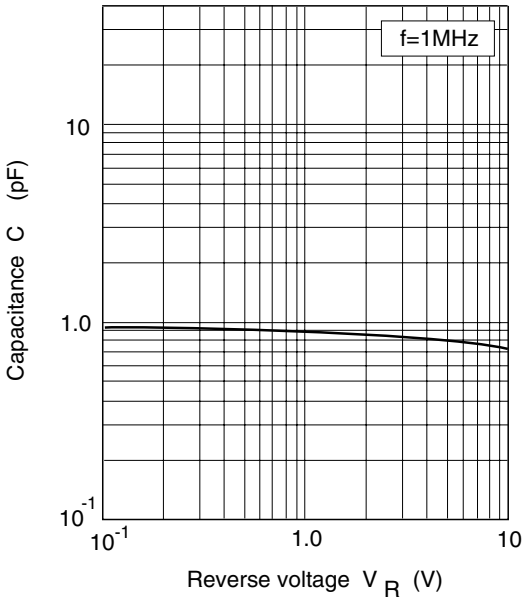
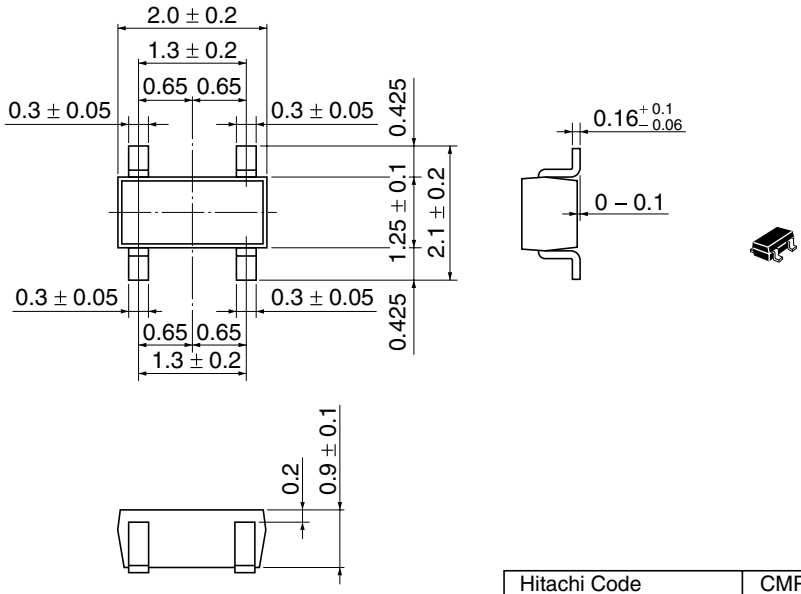


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	CMPAK-4
JEDEC	—
EIAJ	Conforms
Mass	0.006 g

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