Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-843(Z) Rev 0 Mar 2000

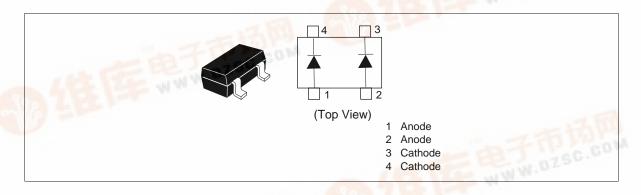
Features

- 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

Outline





Absolute Maximum Ratings (Ta = 25° C) *²

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	Io	100	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55Å`+125	°C

Note 1. Value at duration of 10msec.

Note 2. Two device total.

Electrical Characteristics (Ta = 25° C) *¹

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	V_{F}	_	_	1.2	V	$I_{F} = 100 \text{ mA}$
Reverse current	I _{R1}	_	_	0.2	μΑ	V _R = 250V
	I _{R2}	_	_	100		V _R = 300V
Capacitance	С	_	_	3.0	pF	$V_R = 0V$, $f = 1 MHz$
Reverse recovery time	t _{rr}	_	_	100	ns	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3\text{mA}, R_L = 100\Omega$

Note 1. Per one device.

Main Characteristic

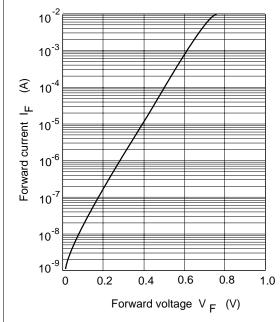
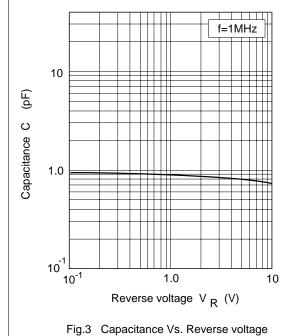


Fig.1 Forward current Vs. Forward voltage



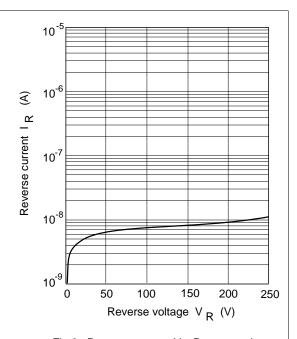
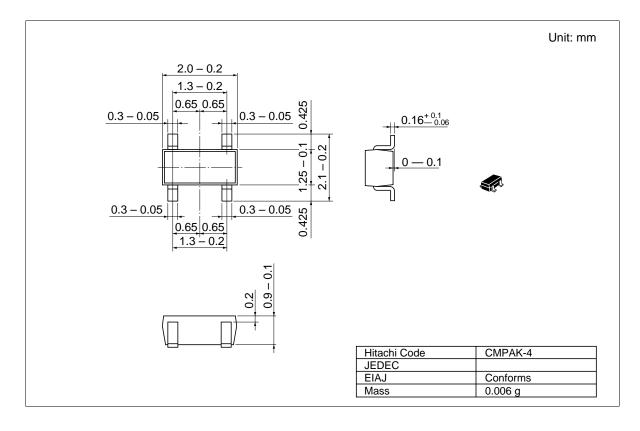


Fig.2 Reverse current Vs. Reverse voltage

Package Dimensions



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