HSB88YP

Silicon Schottky Barrier Diode for High Speed Switching

HITACHI

ADE-208-932A (Z)

Rev. 1 Sep. 2000

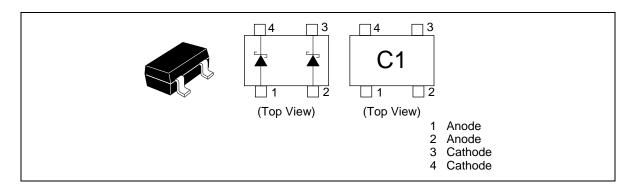
Features

- Low reverse current, Low capacitance.
- CMPAK-4 Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSB88YP	C1	CMPAK-4

Pin Arrangement





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Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit		
Reverse voltage	V _R	10	V		
Average rectified current	l _o *	15	mA		
Junction temperature	Tj	125	°C		
Storage temperature	Tstg	-55 to +125	°C		

Note: Per one device.

Electrical Characteristics *1

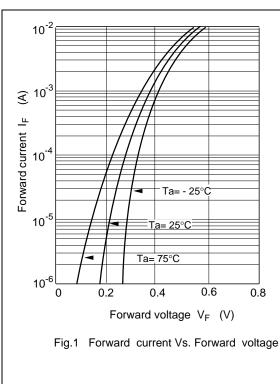
 $(Ta = 25^{\circ}C)$

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	V _{F1}	0.350	o —	0.420	V	I _F = 1 mA
	V _{F2}	0.500	0 —	0.580)	I _F = 10 mA
Reverse current	I _{R1}	_	_	0.2	μΑ	V _R = 2 V
	I _{R2}	_		10	_	V _R = 10 V
Capacitance	С	_	_	0.80	pF	V _R = 0 V, f = 1 MHz
Capacitance deviation	ΔC	_	_	0.10	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Forward voltage deviation	$\Delta V_{\scriptscriptstyle F}$	_	_	10	mV	I _F = 10 mA
ESD-Capability *2	_	30	_	_	V	$C = 200 \text{ pF}, R = 0 \Omega$, Both forward and reverse direction 1 pulse.

Notes: 1. Per one device.

2. Failure criterion ; $I_{_{R}}\!>0.4~\mu\text{A}$ at $V_{_{R}}\!=2~\text{V}$

Main Characteristic



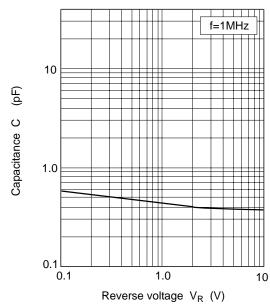


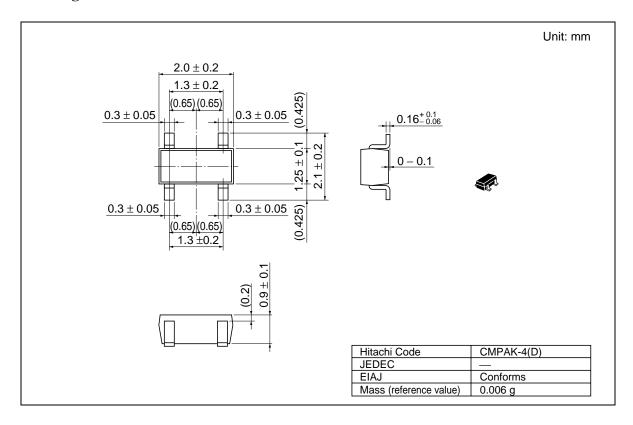
Fig.3 Capacitance Vs. Reverse voltage

10⁻⁶ 10⁻⁷ Reverse current I_R (A) 10⁻⁸ Ta= 25°C 10⁻⁹ Ta= - 25°C 10¹⁰ 8 10 Reverse voltage V_R (V)

Fig.2 Reverse current Vs. Reverse voltage

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Package Dimensions



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