HSB83J

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-489(Z)
Rev 0

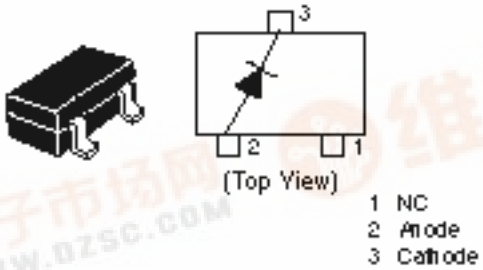
Features

- High reverse voltage. (V_R = 250V)
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSB83J	F7	CMPAK

Outline



HSB83J

Absolute Maximum Ratings (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.

Electrical Characteristics (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

Main Characteristic

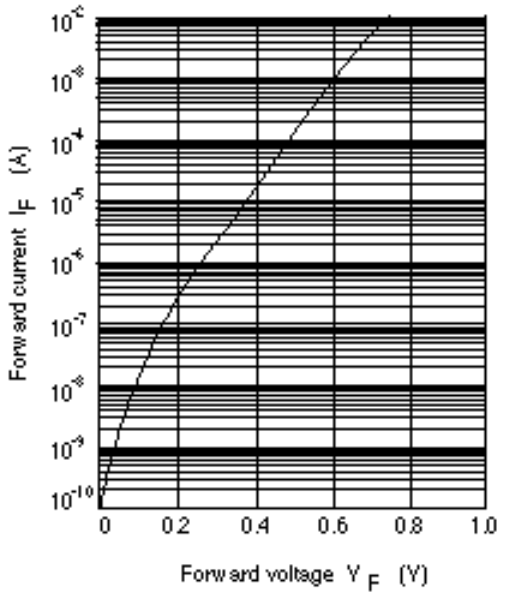


Fig.1 Forward current Vs. Forward voltage

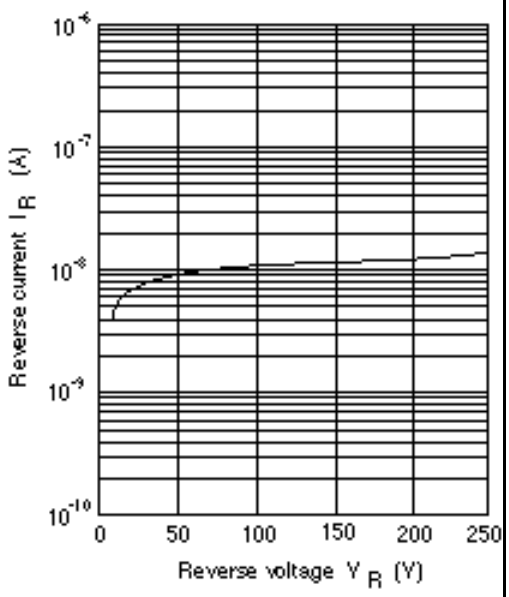


Fig.2 Reverse current Vs. Reverse voltage

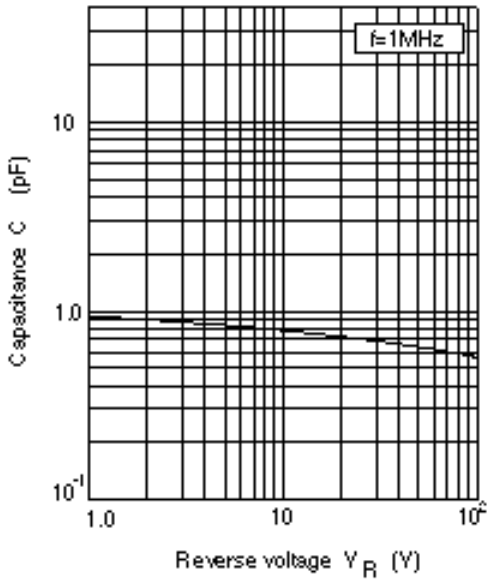
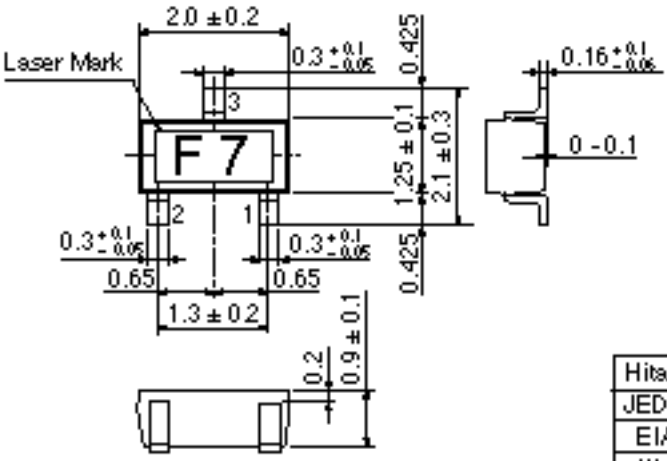


Fig.3 Capacitance Vs. Reverse voltage

HSB83J

Package Dimensions

Unit : mm



Hitachi Code	CMPAK
JEDEC Code	—
EIAJ Code	SC-70
Weight (g)	0.006