

HSS104

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

 Rev. 1
 Aug. 1995

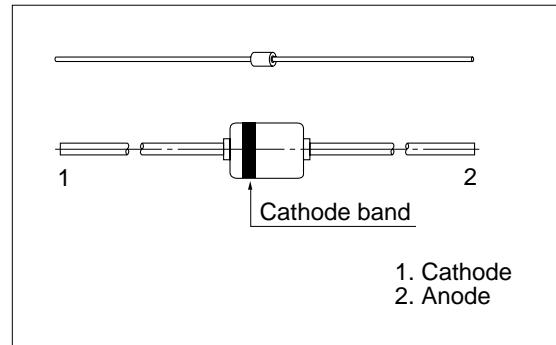
Features

- Short reverse recovery time and forward recovery time.
- Suitable for 5mm pitch high speed automatic insertion.
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

Type No.	Cathode band	Package Code
HSS104	Blue	MHD

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	40	V
Reverse voltage	V_R	35	V
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	0.4	A
Average forward current	I_O	110	mA
Power dissipation	P_d	300	mW
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 to +175	°C

* Within 1s forward surge current.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.2	V	$I_F = 100 \text{ mA}$
Reverse current	I_R	—	—	0.5	μA	$V_R = 35 \text{ V}$
Capacitance	C	—	—	3.0	pF	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 50 \Omega$

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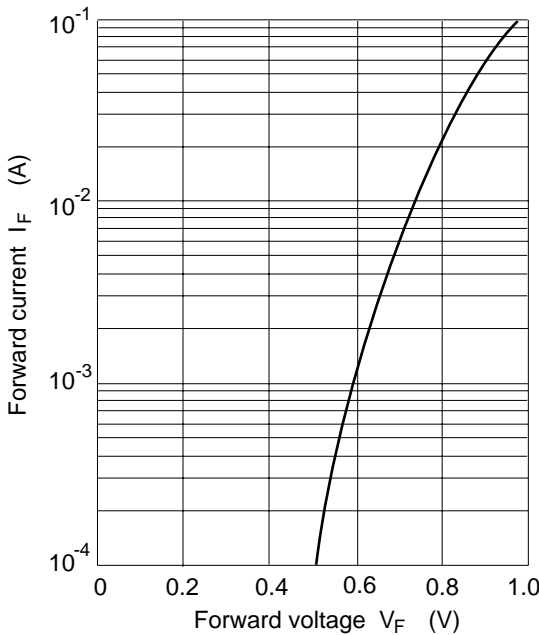


Fig.1 Forward current Vs. Forward voltage

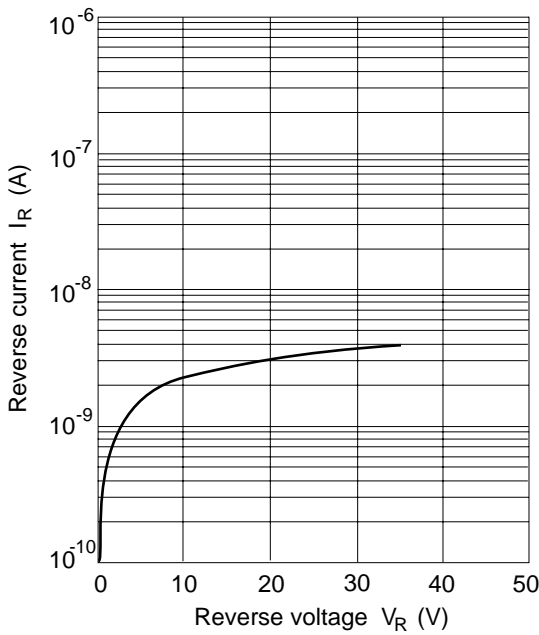


Fig.2 Reverse current Vs. Reverse voltage

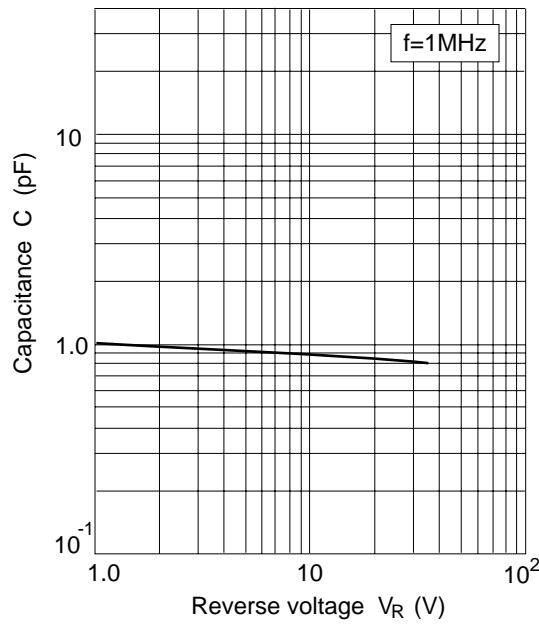
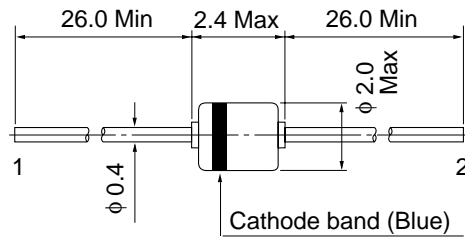


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

HITACHI Code	MHD
JEDEC Code	DO-34
EIAJ Code	—
Weight (g)	0.084