

HSK120

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

Rev. 2
Aug. 1995

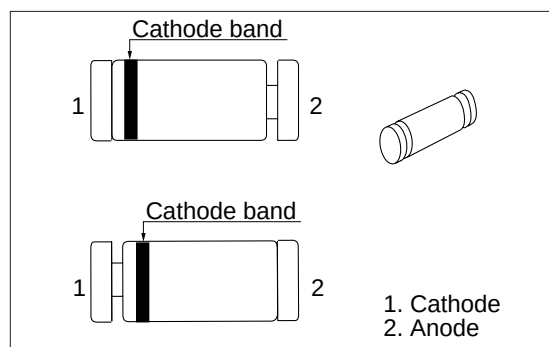
Features

- Low reverse recovery time. ($t_{rr}=3.0\text{ns}$ max)
- LLD package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Cathode band	Package code
HSK120	White	LLD

Outline



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	70	V
Reverse voltage	V_R	60	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	4	A
Average forward current	I_O	150	mA
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +175	$^\circ\text{C}$

* Within $1\mu\text{s}$ forward surge current.

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.8	V	$I_F = 10\text{ mA}$
Reverse voltage	V_R	70	—	—	V	$I_R = 5\text{ }\mu\text{A}$
Reverse current	I_R	—	—	0.1	μA	$V_R = 60\text{ V}$
Capacitance	C	—	—	3.0	pF	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\text{ }\Omega$, $I_{rr} = 0.1\text{ mA}$

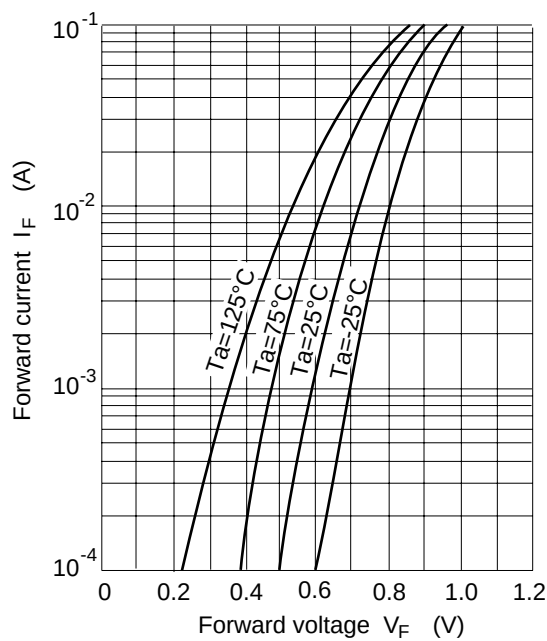


Fig.1 Forward current Vs. Forward voltage

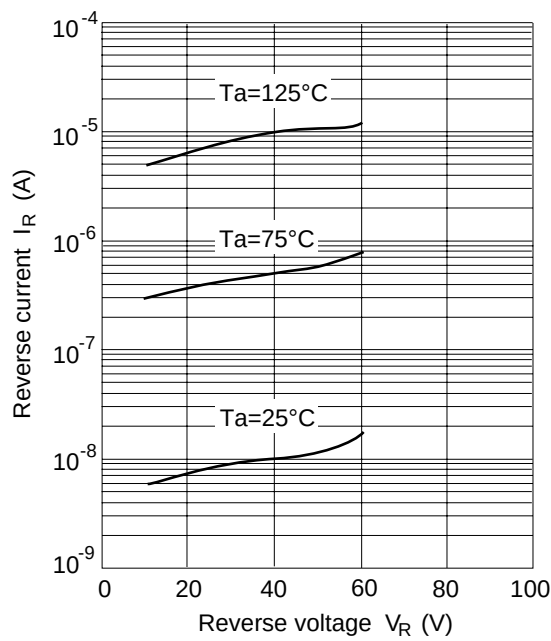


Fig.2 Reverse current Vs. Reverse voltage

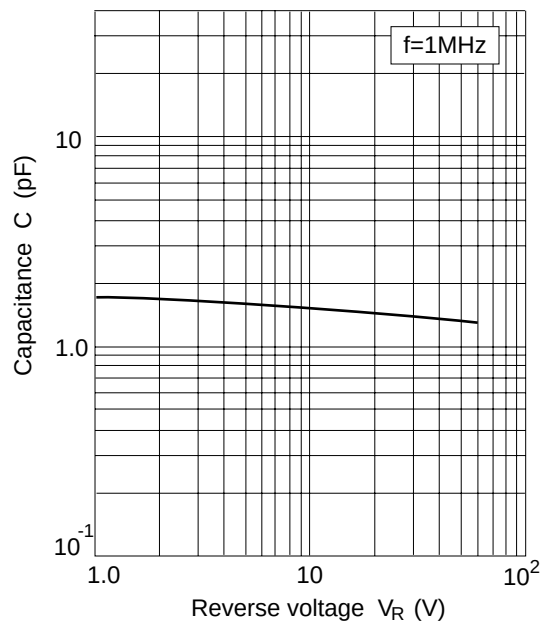
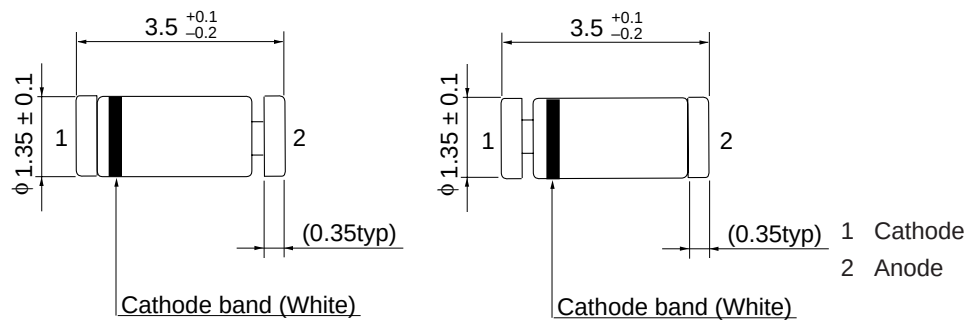


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



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HITACHI Code	LLD
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.027