
1S2075(K)

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-144C (Z)

Rev.3
Dec. 2000

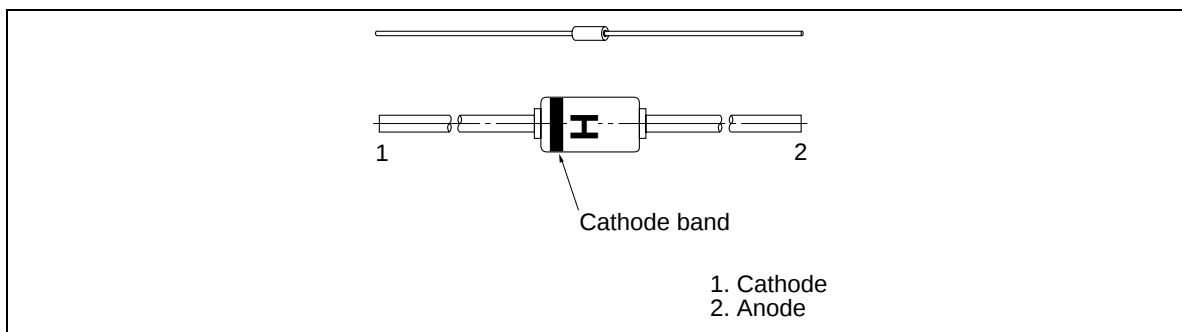
Features

- Low capacitance. ($C = 3.5 \text{ pF max}$)
- Short reverse recovery time. ($t_r = 8.0 \text{ ns max}$)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1S2075(K)	Green	H	DO-35

Outline



1S2075(K)

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	35	V
Reverse voltage	V_R	30	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	600	mA
Average forward current	I_O	100	mA
Power dissipation	Pd	250	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	-65 to +175	°C

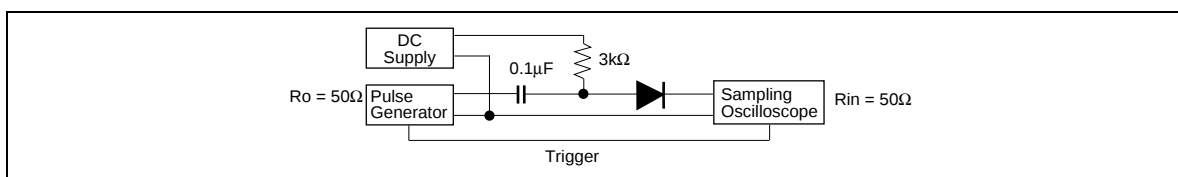
Note: Within 1s forward surge current.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.8	V	$I_F = 10 \text{ mA}$
Reverse current	I_R	—	—	0.1	μA	$V_R = 30 \text{ V}$
Capacitance	C	—	—	3.5	pF	$V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}^*	—	—	8.0	ns	$I_F = I_R = 10 \text{ mA}$, $I_{rr} = 1 \text{ mA}$

Note: Reverse recovery time test circuit



Main Characteristic

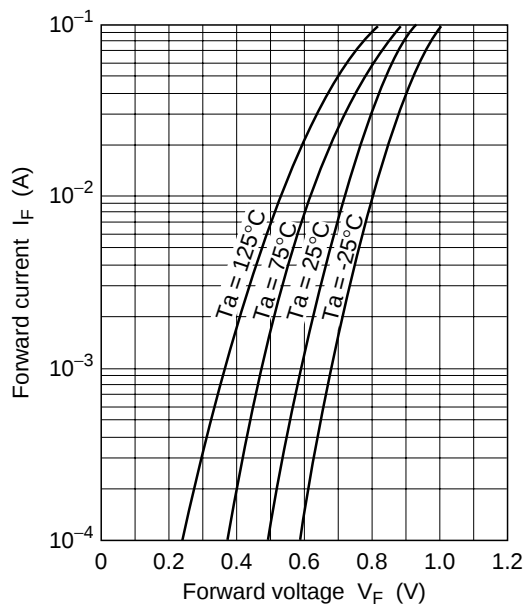


Fig.1 Forward current Vs. Forward voltage

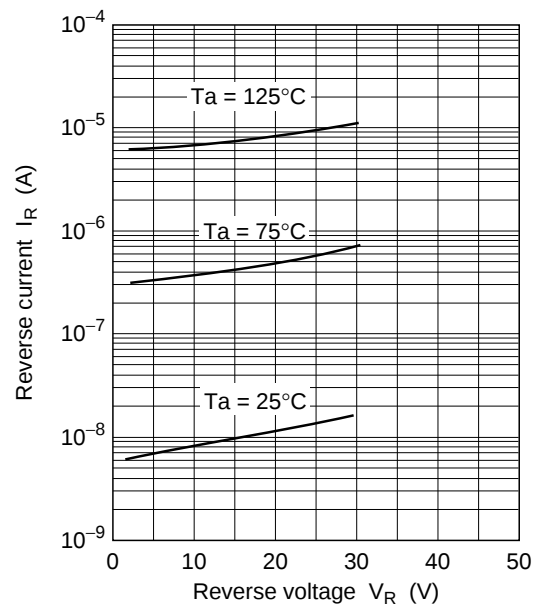


Fig.2 Reverse current Vs. Reverse voltage

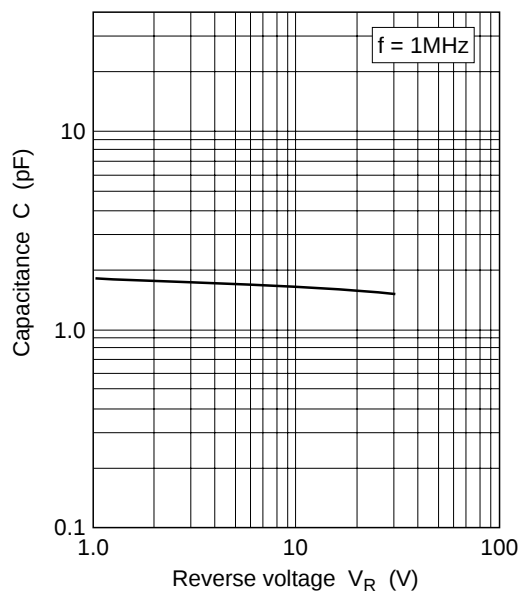
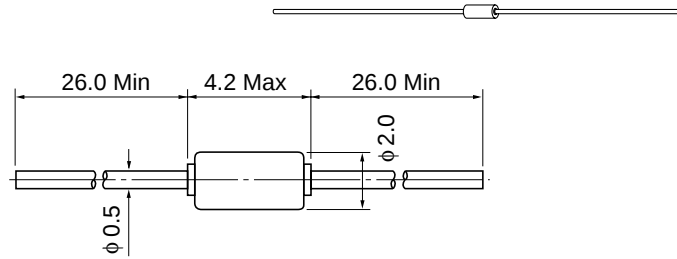


Fig.3 Capacitance Vs. Reverse voltage

1S2075(K)

Package Dimensions

Unit: mm



Hitachi Code	DO-35
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	0.13 g

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