1N4148

Silicon Epitaxial Planar Diode for Various Detector, Modulator, Demodulator

HITACHI

ADE-208-147C (Z)

Rev.3
Dec. 2001

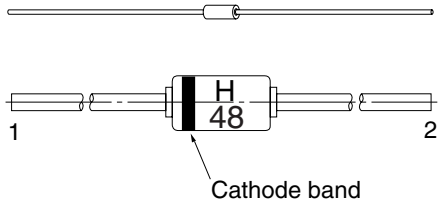
Features

- Low capacitance. (C = 4.0 pF max)
- Short reverse recovery time. (t_{rr} = 4.0 ns max)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1N4148	Black	H48	DO-35

Outline



1. Cathode
2. Anode

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Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	100	V
Reverse voltage	V_R	75	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM} *	1	A
Average forward current	I_O	150	mA
Power dissipation	Pd	500	mW
Junction temperature	Tj	200	°C
Storage temperature	Tstg	–65 to +200	°C

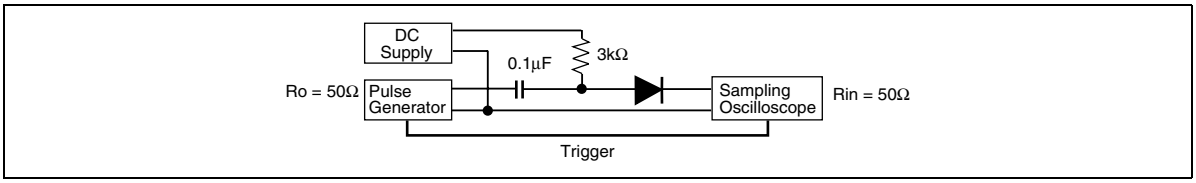
Note: Within 1s forward surge current.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	I_F = 10 mA
Reverse current	I_R	—	—	25	nA	V_R = 20 V
Capacitance	C	—	—	4.0	pF	V_R = 0 V, f = 1 MHz
Reverse recovery time	t_{rr} *	—	—	4.0	ns	I_F = 10 mA, V_R = 6 V, Irr = 1 mA, R_L = 100 Ω

Note: Reverse recovery time test circuit



Main Characteristic

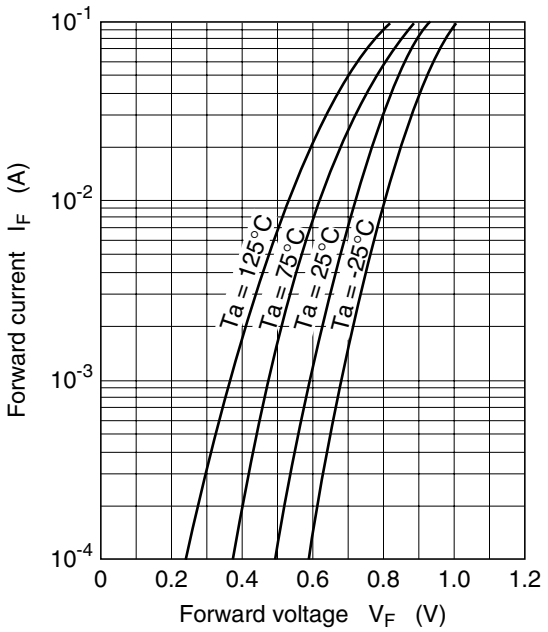


Fig.1 Forward current vs. Forward voltage

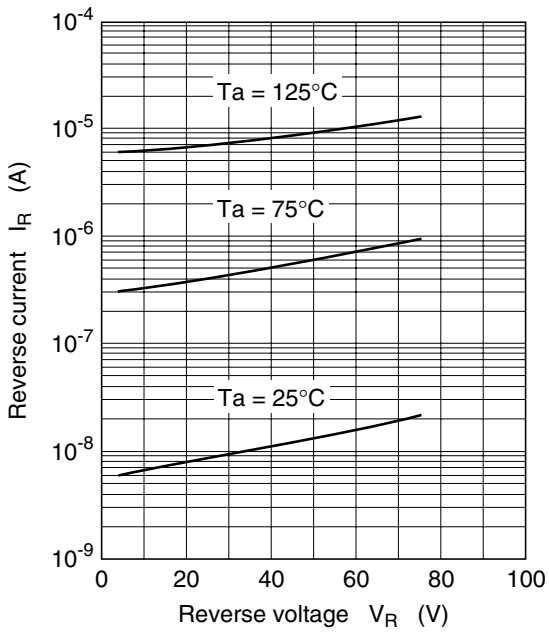


Fig.2 Reverse current vs. Reverse voltage

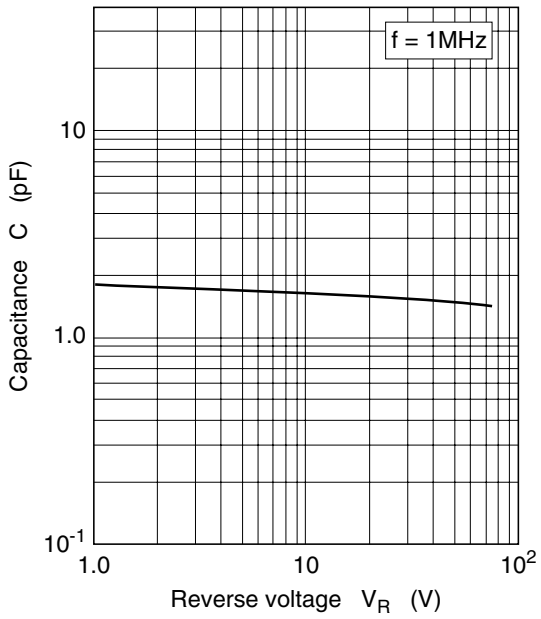
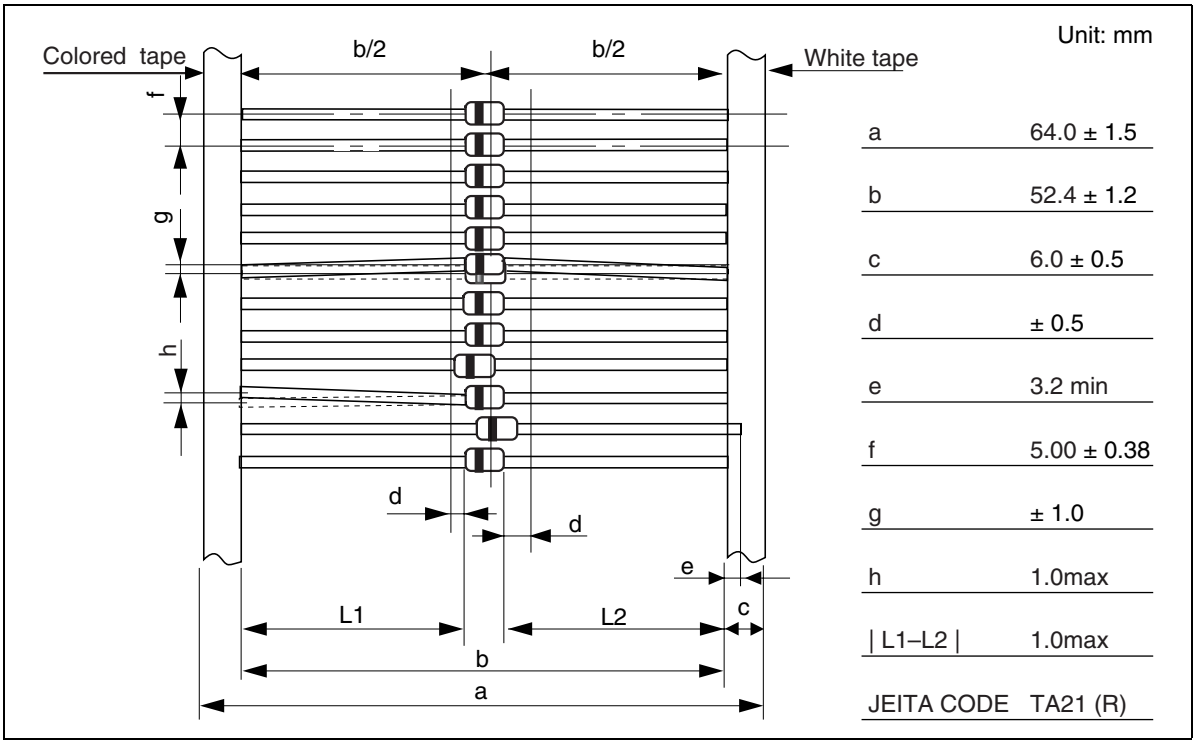
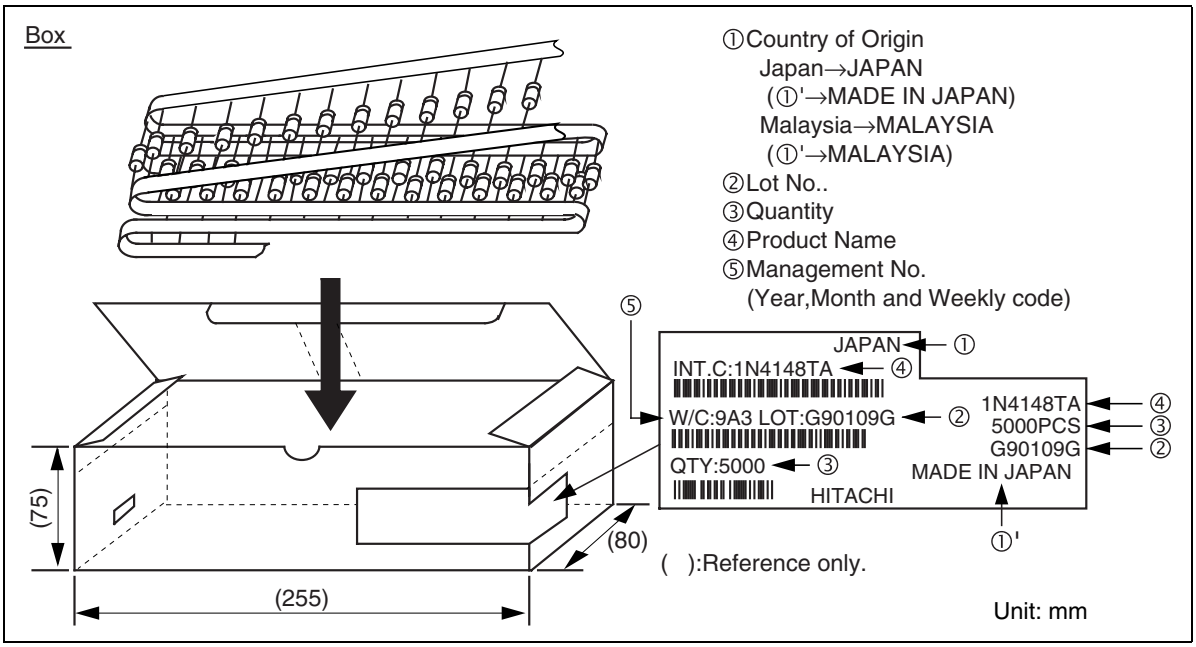


Fig.3 Capacitance vs. Reverse voltage

Ammo Pack Taping (TA TYPE)



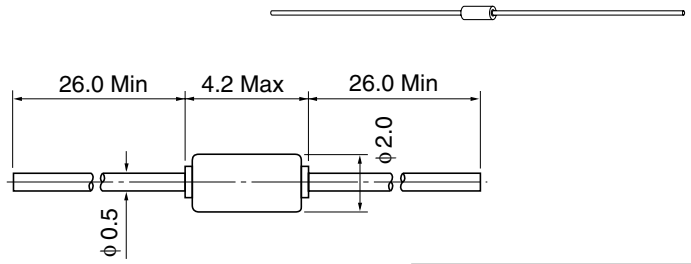
Taping appearance



Package Dimensions

As of July, 2001

Unit: mm



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

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