

# SPECIFICATION

DEVICE NAME : High Voltage Silicon Diode

TYPE NAME : ESJA09-12

SPEC. No. :

DATE :

Fuji Electric Co.,Ltd.

	DATE	NAME	APPROVED	Fuji Electric Co.,Ltd.	
DRAWN				DWGNO.	
CHECKED					

## 1. SCOPE

This specification provide the ratings and the requirements for high voltage silicon diode ESJA09-12 made by FUJI ELECTRIC CO.,LTD.

## 2. OUT VIEW and IDENTIFICATION

### 2.1. SHAPE AND DIMENSIONS

Shape and dimensions are described in Fig.2.

### 2.2. MARKING

The diode shall be marked with Cathode Mark and Lot No..

## 3. ABSOLUTE MAX. RATINGS. ( Ta=25°C unless otherwise noted. )

Items	Conditions	Symbols	Ratings	Units
Repetitive peak reverse voltage.		$V_{RRM}$	12	kVpeak
Non-Repetitive peak forward current.	50Hz Sine-half wave peak value	$I_{FSM}$	0.5	Apeak
Average forward current.	50Hz Sine Wave	$I_{AV}$	5	mA
Allowable junction temperature.		$T_j$	120	°C
Storage temperature range.		$T_{stg}$	-40~120	°C
Allowable operating case temperature.		$T_c$	100	°C

## 4. ELECTRICAL CHARACTERISTICS ( Ta=25°C unless otherwise noted. )

Items	Conditions	Symbols	Ratings	Units
Maximum forward voltage drop	IF=10mA	VF	42.0	V
Maximum reverse current	VR=12kV	$IR_1$	2	$\mu A$
Maximum reverse current	VR=12kV, 100°C	$IR_2$	5	$\mu A$
Maximum reverse recovery time	IF=2mA, IR=4mA	trr	0.05	$\mu S$
Maximum junction capacitance	f=1MHz, VR=0V	Cj	1	pF

## 5. MECHANICAL CHARACTERISTICS

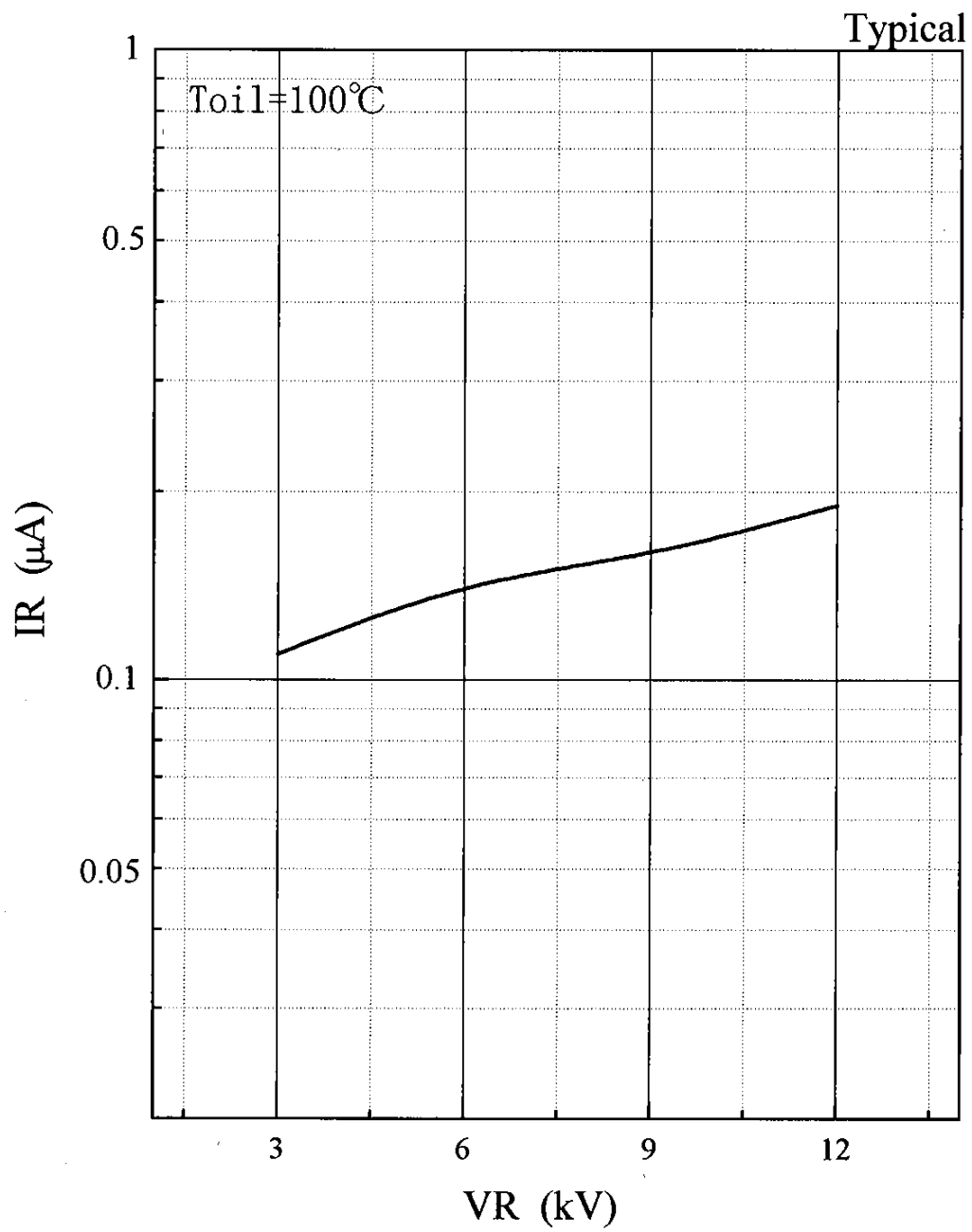
Weight : Ca. 0.3 gr.

Vibration proof : 5 G

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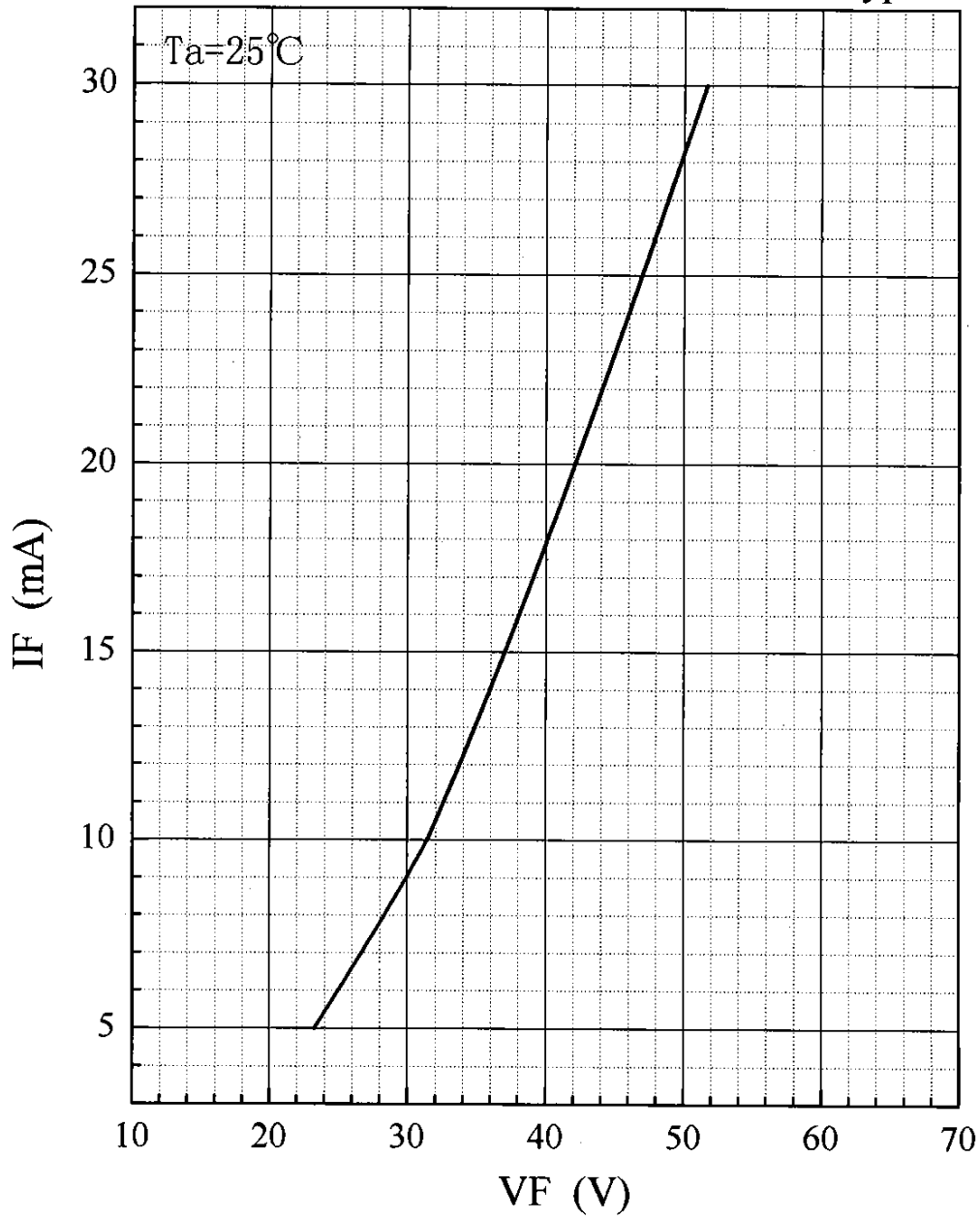
DWG.NO.

H04-004-03



*Fig.2 Reverse characteristic[VR-IR]*

Typical



*Fig.1 Forward characteristic [VF-IF]*

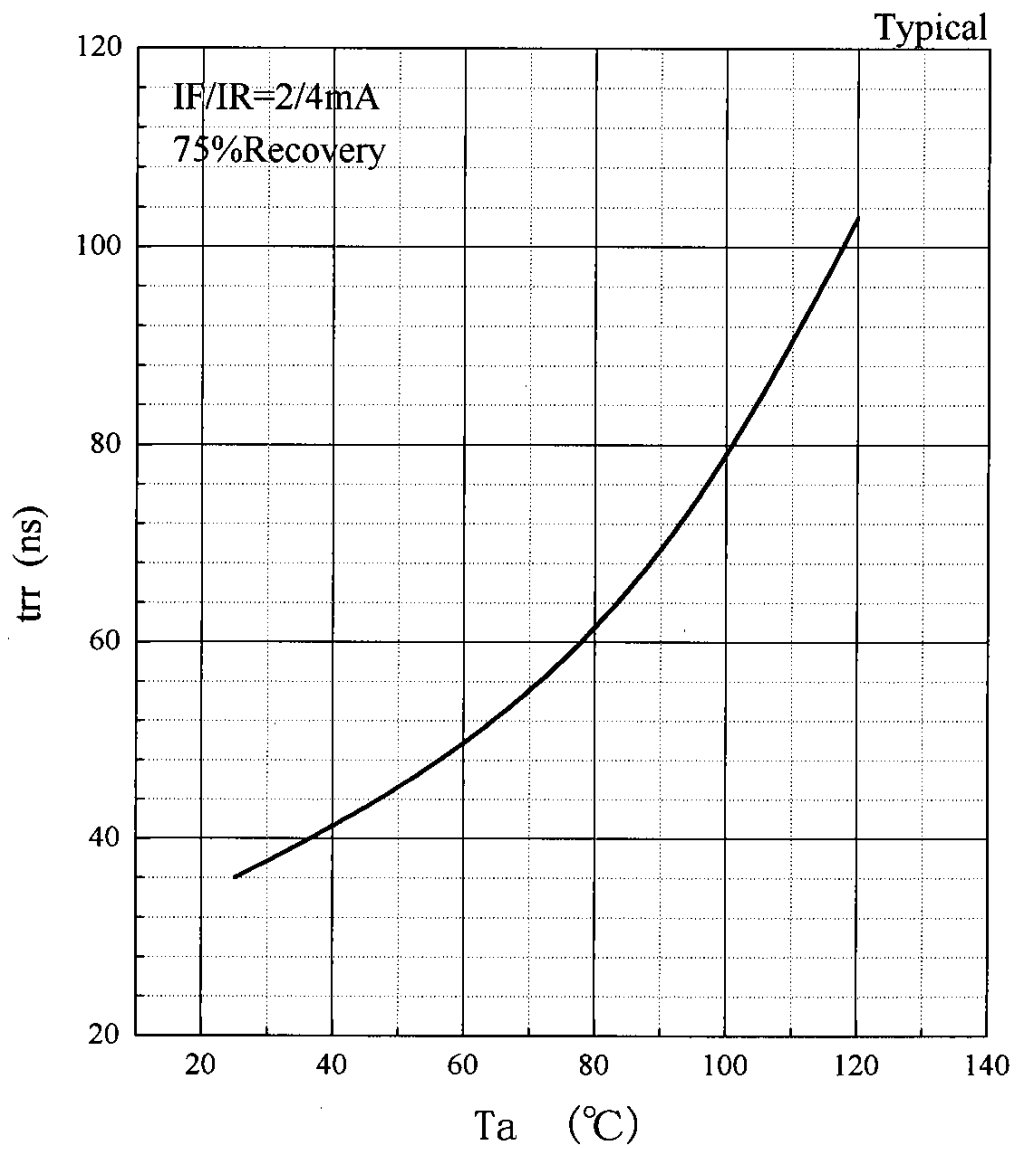
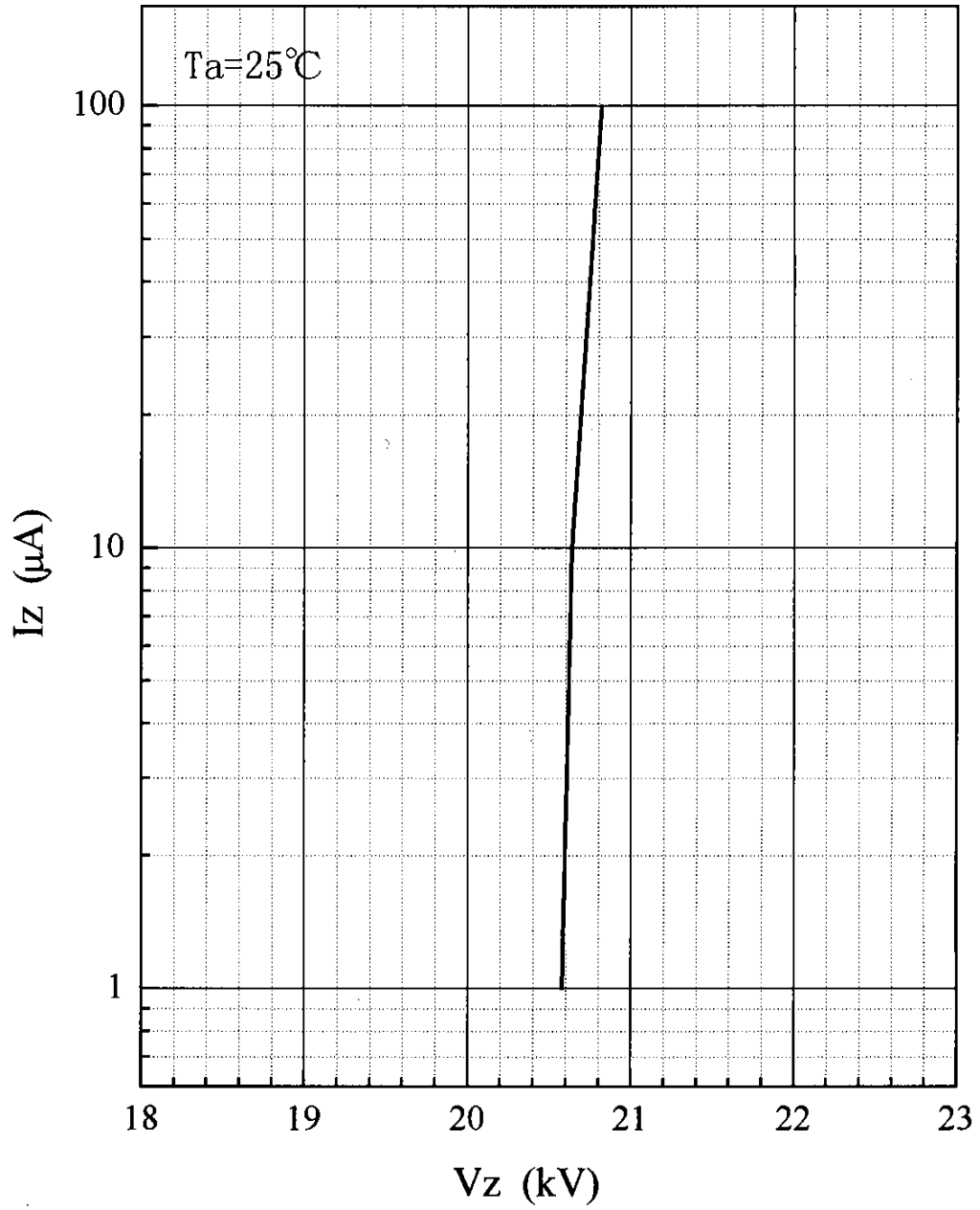


Fig.4 Reverse recovery time characteristic[Ta-trr]

Typical



*Fig.3 Avalanche characteristic [ $V_z$ - $I_z$ ]*

Dimensions

Unit : mm

ESJA09-□□

