

# **NDB171**

**ESD Protection Diode** 

#### **Features**

- Transient protection for data lines to IEC 61000-4-2(ESD) 15KV(air), 8KV(contact)
- Small package for use in portable electronics
- Bidirectional type pin configuration structure.
- Protects one I/O or power line.

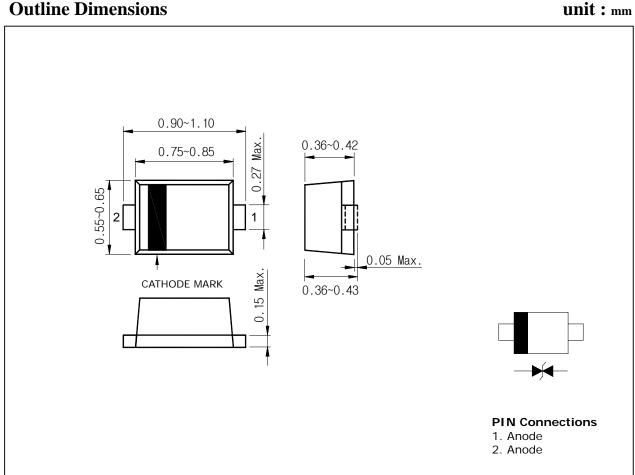
## **Applications**

Noise suppression on signal line

# **Ordering Information**

Type NO.	Marking	ng Package Code		
NDB171	В	SOD-923		

#### **Outline Dimensions**



# **Absolute Maximum Ratings**

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Peak Pulse Power ( tp = 8/20 \( \mu \s \) )	P <sub>PK</sub>	100	W
Power dissipation	$P_{D}$	100	mW
Junction temperature	TJ	150	°C
Storage temperature range	T <sub>STG</sub>	-55 ~ +150	°C

### **Electrical Characteristics**

(Ta=25°C)

2

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Zener voltage	Vz	I <sub>Z</sub> =1mA	5.78	-	7.82	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =3.5V	-	-	0.5	μA
Total capacitance	Сл	V <sub>R</sub> =0V, f=1MHz	-	25	-	pF

- \* Note. Pin 1 should be connected directly to a ground plane on the board
- \* Recommend PCB solder land (Unit: mm)

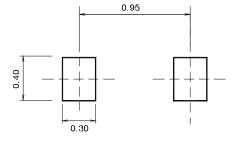


Fig. 1 V<sub>z</sub>.I<sub>z</sub>

100

V

I

I

I

I

O.1

O.001

O.0001

3 4 5 6 7 8 9 10

Zener Voltage Vz [V]

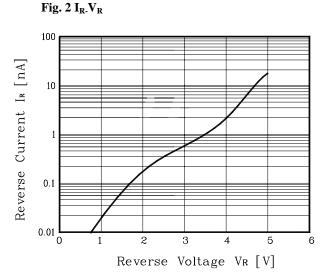
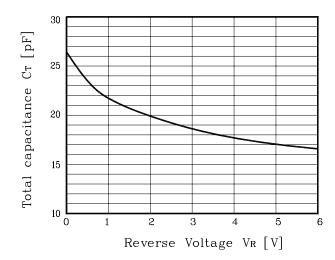


Fig. 3  $C_T$ .  $V_R$ 



The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.