

#### Features

- Transient protection for data lines to IEC 61000-4-2(ESD) 15KV(air), 8KV(contact)
- Small package for use in portable electronics

### Applications

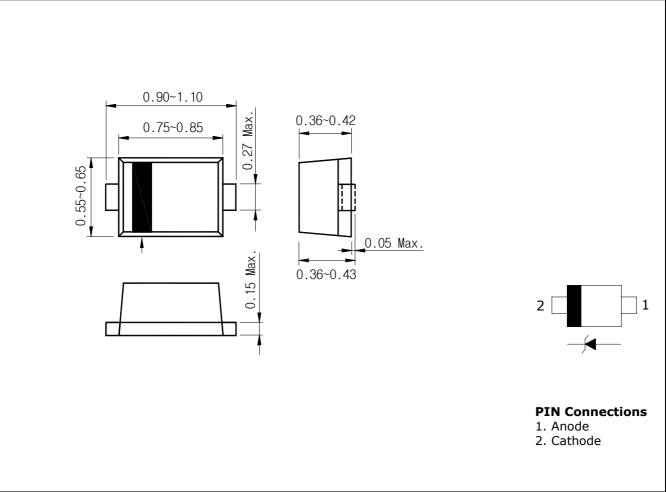
• ESD Protection

### **Ordering Information**

Type NO.	Marking	Package Code		
ND171	U	SOD-923		

#### **Outline Dimensions**

unit : mm



# **Preliminary**

## **ND171**

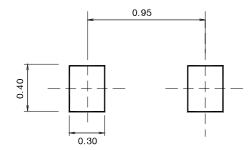
### **Absolute Maximum Ratings**

Absolute Maximum Ratings	Ta=25°C		
Characteristic	Symbol	Rating	Unit
Peak pulse power ( tp = $8/20 \ \mu$ s )	P <sub>PK</sub>	40	W
Power dissipation	P <sub>D</sub>	150	mW
Junction temperature	Tj	150	°C
Operating temperature range	T <sub>opr</sub>	-55 ~ +125	°C
Storage temperature range	T <sub>stg</sub>	-55 ~ +150	°C

#### **Electrical Characteristics**

Electrical Characteristics Ta=25°C										
Characteristic	Symbol	Test Condition		Min.	Тур.	Max.	Unit			
Zener voltage	Vz	I <sub>Z</sub> =1mA		6.5	-	7.5	V			
Reverse current	I <sub>R</sub>	V <sub>R</sub> =3.5V		-	-	0.5	μA			
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =50mA		-	0.9	1.2	V			
ESD Voltage (IEC61000-4-2) C=150pF, R=330Ω (Repeat by 10 times) C	C=150pF, R=330Ω	Contact	±8	-	-	кv				
	Air	±15	-	-	ΓV					
Junction capacitance	Cj	V <sub>R</sub> =0V, f=1MHz		-	30	-	pF			

#### **\*** Recommend PCB solder land (Unit : mm)



## Preliminary

### **ND171**

Fig. 1 V<sub>Z-</sub>I<sub>Z</sub>

Fig. 2 I<sub>R-</sub>V<sub>R</sub>

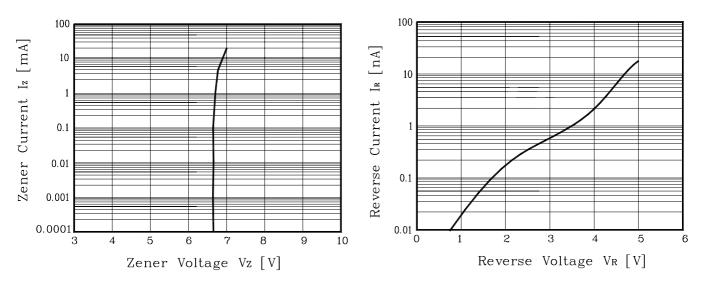
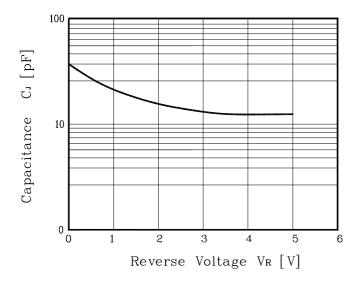


Fig. 3  $C_{j}$ - $V_R$ 



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