



**YEA SHIN TECHNOLOGY CO., LTD**  
**CAN/LIN ESD Protection Diode**

YCAN26A8YCS-A



**Features**

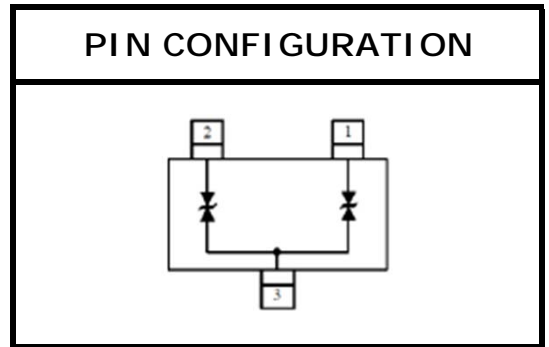
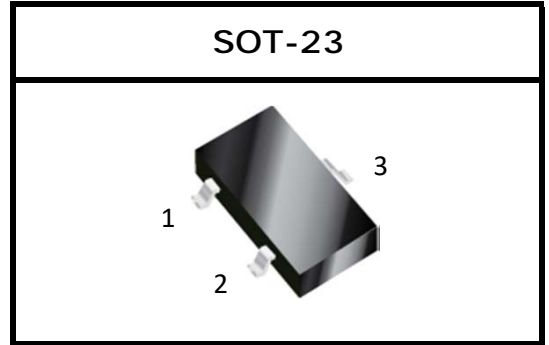
- Capacitance : 30pF (typ.)
- IEC61000-4-2 (ESD) : ±30kV (air)
- IEC61000-4-2 (ESD) : ±30kV (contact)
- IEC61000-4-5 (Lightning) : 6A (8/20 μs)
- Marking : AQ8
- AEC-Q101 qualified

**Main Applications**

- Industrial Control Networks :  
 Smart Distribution Systems (SDS®)  
 DeviceNet™
- Automotive Networks :  
 Low and High-Speed CAN  
 Fault Tolerant CAN
- LIN bus protection

**Ordering Information**

Device	Qty per Reel	Reel Size
YCAN26A8YCS-A	3000	7 Inch



**Maximum Ratings (TA=25°C unless otherwise noted)**

Parameter	Symbol	Test conditions	Limit	Unit
ESD Rating per IEC61000-4-2	V <sub>ESD</sub>	Contact	±30	kV
		Air	±30	
Peak pulse power	P <sub>PK</sub>	tp = 8/20 μs	270	W
Peak Pulse current	I <sub>PP</sub>	tp = 8/20 μs	6	A
Operating junction temperature range	T <sub>J</sub>		-40~+ 125	°C
Storage temperature range	T <sub>STG</sub>		-55~+ 150	°C

**Electrical Characteristics (TA=25°C unless otherwise noted)**

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse working voltage	V <sub>RWM</sub>		-	-	24	V
Breakdown voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	26.7	-	35	V
Reverse leakage current	I <sub>R</sub>	V <sub>RWM</sub> =24V	-	0.01	0.1	μA
Surge clamping voltage (tp=8/20us)	V <sub>C</sub>	I <sub>PP</sub> =6A	-	-	45	V
Junction capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	-	30	35	pF

# DEVICE CHARACTERISTICS

## YCAN26A8YCS-A

FIG. 1-Pulse Waveform

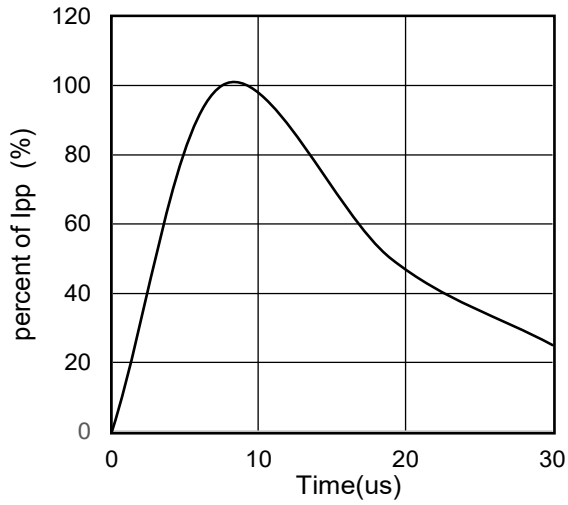


FIG. 2-I/V curve

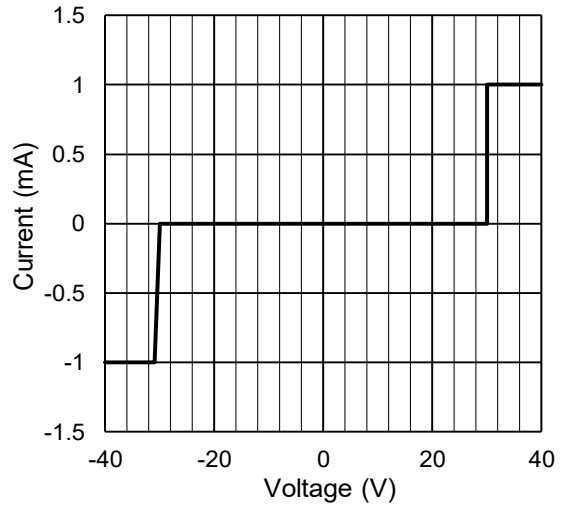


FIG. 3-ESD Clamping of I/O to GND  
(+8kV Contact per IEC 61000-4-2)

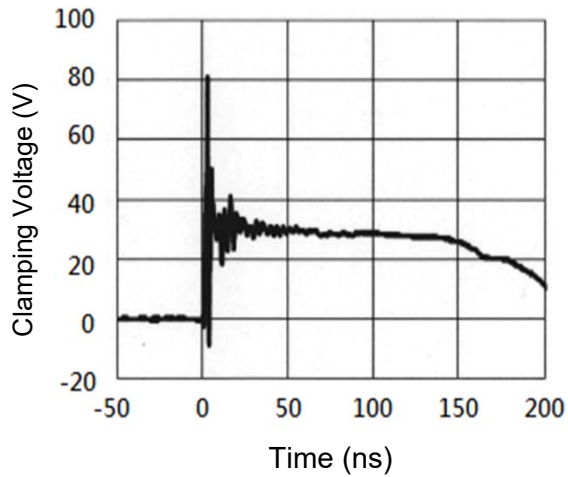
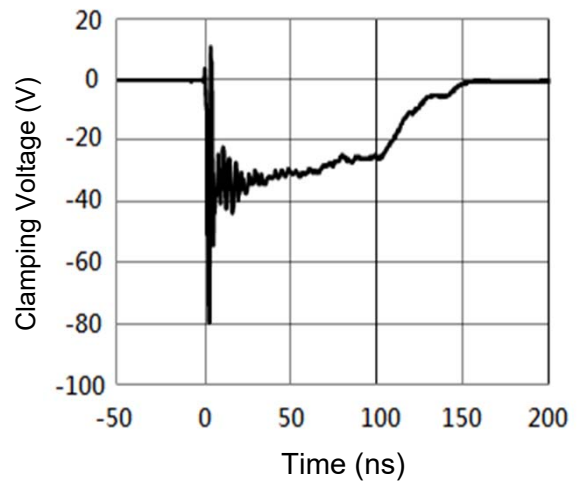


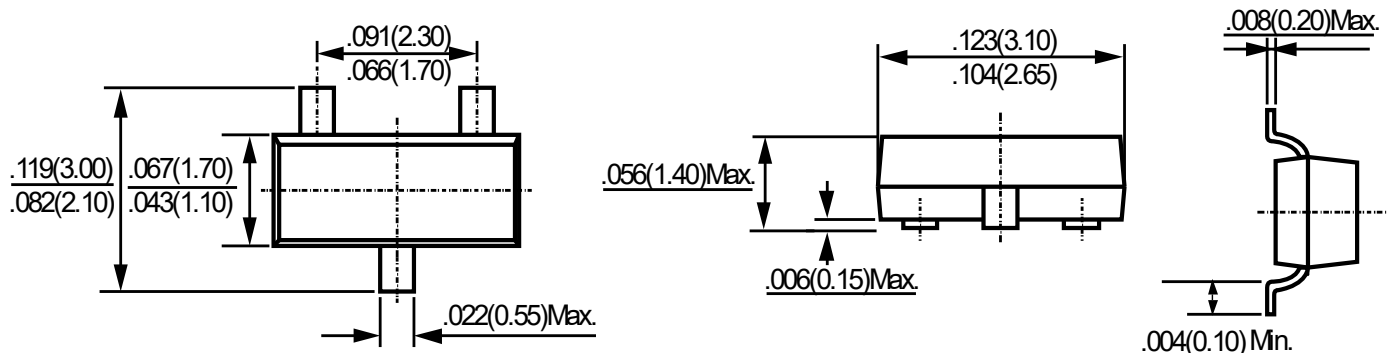
FIG. 4-ESD Clamping of I/O to GND  
(-8kV Contact per IEC 61000-4-2)



# PACKAGE OUTLINE & DIMENSIONS

## YCAN26A8YCS-A

### Package Outline Dimensions



### SOT-23

Dimensions in inches and (millimeters)

### Suggested Pad Layout

Dimension	Outline	SOT-23 (mm)
A		2.90
C		0.80
D		0.90
E		2.00
F		1.35

