

# GES36VAP

## ESD Protection Diode

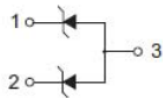
**VOLTAGE** 36 Volt

### FEATURES

- Uni-directional ESD protection of one line
- Low reverse clamping voltage
- Low leakage current
- IEC 61000-4-2 ±8KV air ,±8KV contact
- Lead free in compliance with EU RoHS

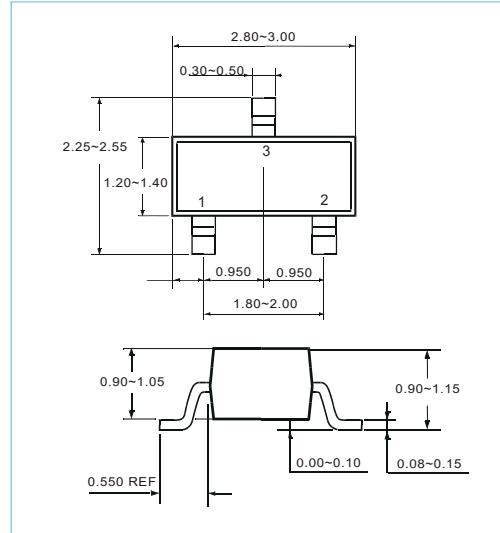
### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



### Schematic Diagram

**SOT-23** Unit:mm



### ABSOLUTE MAXIMUM RATINGS( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
JESD22-A114-B ESD Voltage	$V_{\text{ESD}}^{(1)}$	±16	kV
ESD Voltage		±0.4	
Peak Pulse Power	$P_{\text{PP}}^{(2)}$	240	W
Peak Pulse Current	$I_{\text{PP}}^{(2)}$	3	A
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{\text{stg}}$	-55 ~ +150	°C

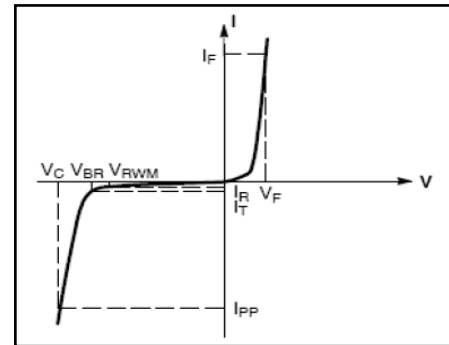
(1).Device stressed with ten non-repetitive ESD pulses.

(2).Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5.

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## ELECTRICAL PARAMETER

Symbol	Parameter
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Peak Pulse Current
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{RWM}$	Reverse Standoff Voltage
$V_F$	Forward Voltage @ $I_F$
$I_F$	Forward Current



V-I characteristics for a uni-directional TVS

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	mbol	Test conditions	Min	Typ	Max	Unit
Reverse stand off voltage	$V_{RWM}^{(3)}$				36	V
Reverse leakage current	$I_R$	$V_{RWM}=36\text{V}$			1	$\mu\text{A}$
Breakdown voltage	$V_{(BR)}$	$I_T=1\text{mA}$	40		48	V
Clamping voltage	$V_C^{(4)}$	$I_{PP}=3\text{A}$			80	V
Forward voltage	$V_F$	$I_F=10\text{mA}$			0.9	V
Junction capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$		30		pF

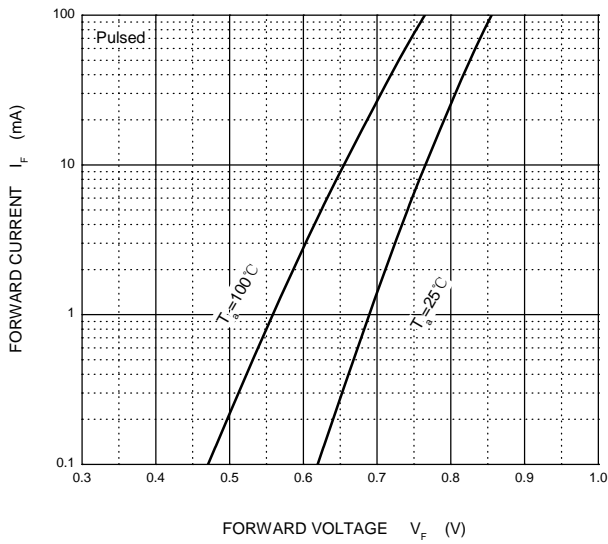
(3). Other voltages available upon request.

(4). Non-repetitive current pulse 8/20 $\mu\text{s}$  exponential decay waveform according to IEC61000-4-5

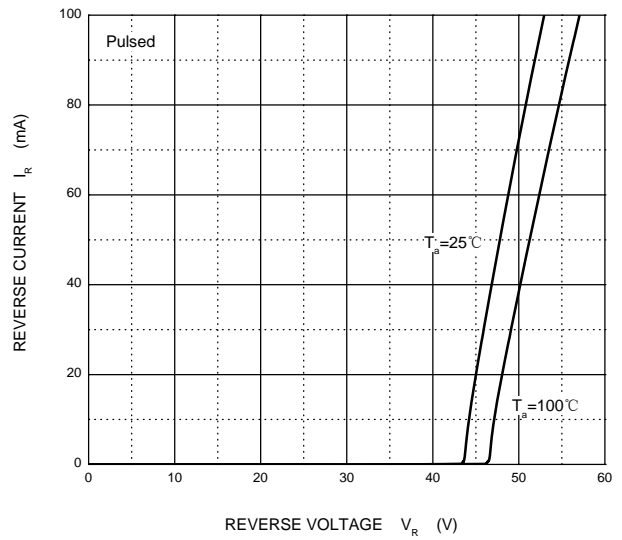
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## Typical Characteristics

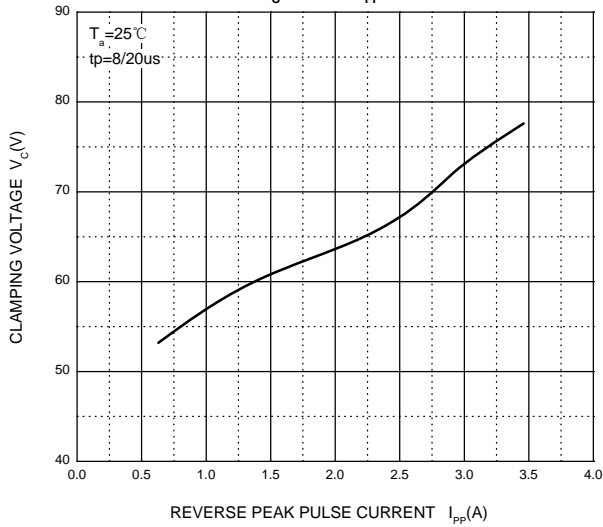
Forward Characteristics



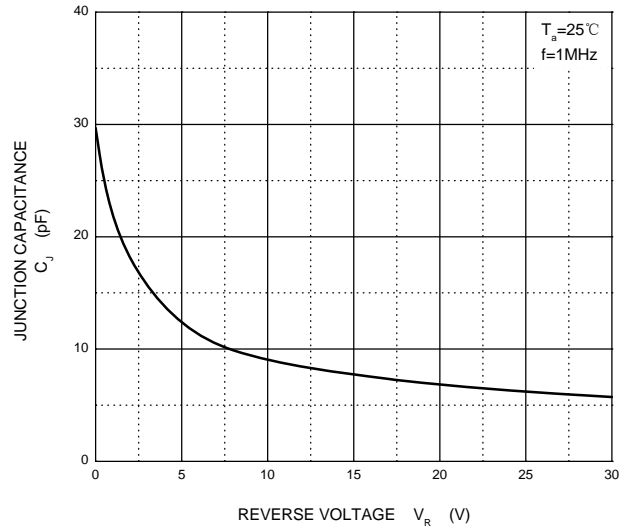
Reverse Characteristics



$V_C$  —  $I_{PP}$



Capacitance Characteristics

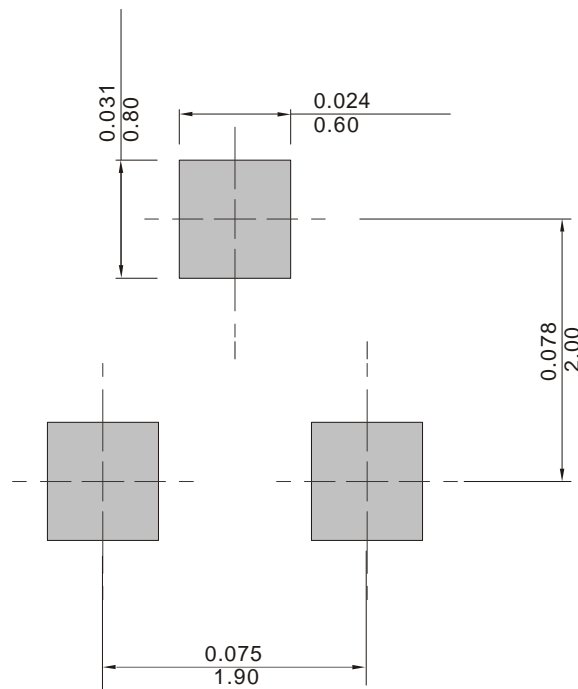


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## MOUNTING PAD LAYOUT

### SOT-23

Unit: Inch(mm)



## ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
GES36VAP	SOT-23	7 Inch	3000