



Micro Commercial Components



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ESD24VD5

24Volts
ESD Protection
Devices

Features

- Halogen free available upon request by adding suffix "-HF"
Low reverse clamping voltage
Excellent clamping capability
Low leakage
ESD rating of class 3(>16KV)per Human Body Mode
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1
Marking: ZY

Maximum Ratings

- Operating Junction & Storage Temperature: -55°C to +150°C

Table with 4 columns: Parameter, Symbol, Limits, unit. Rows include IEC61000-4-2(ESD) Air Contact, ESD Voltage per human body mode per machine mode, Peak Pulse Power, and Peak Pulse Current.

- (1).Device stressed with ten non-repetitive ESD pulses.
(2).Non-repetitive current pulse 8/20µs exponential decay waveform according to IEC61000-4-5.

SOD523

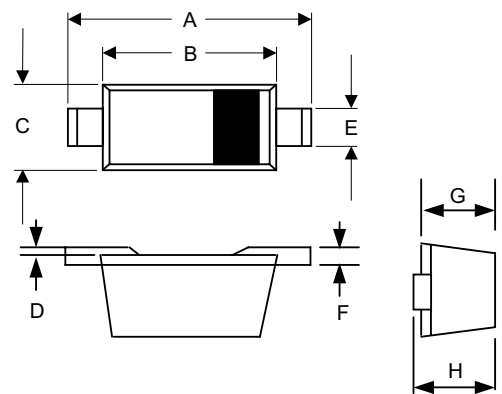
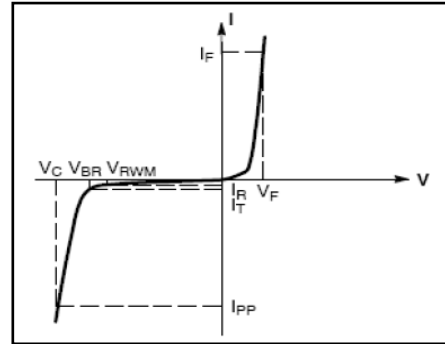


Table titled DIMENSIONS with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A through H correspond to dimensions in the diagram.

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

Symbol	meter
$V_C$	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,  $V_F = 0.9\text{ V Max.}$  @  $I_F = 10\text{mA}$  for all types)

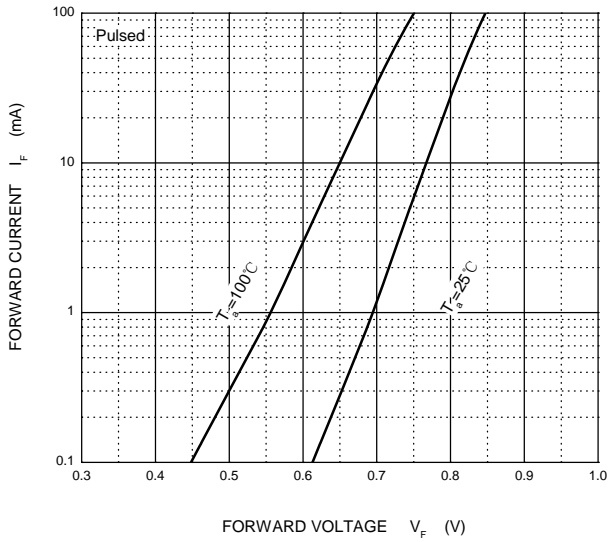
Parameter	mbol	Test conditions	Min	Typ	Max	Unit
Reverse stand off voltage	$V_{RWM}^{(1)}$				24	V
Reverse leakage current	$I_R$	$V_{RWM}=24\text{V}$			1	$\mu\text{A}$
Breakdown voltage	$V_{(BR)}$	$I_T=1\text{mA}$	26.7		33	V
Clamping voltage	$V_C^{(2)}$	$I_{PP}=7.5\text{A}$			44	V
Forward voltage	$V_F$	$I_F=10\text{mA}$			0.9	V
Junction capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$		36		pF

(1). Other voltages available upon request.

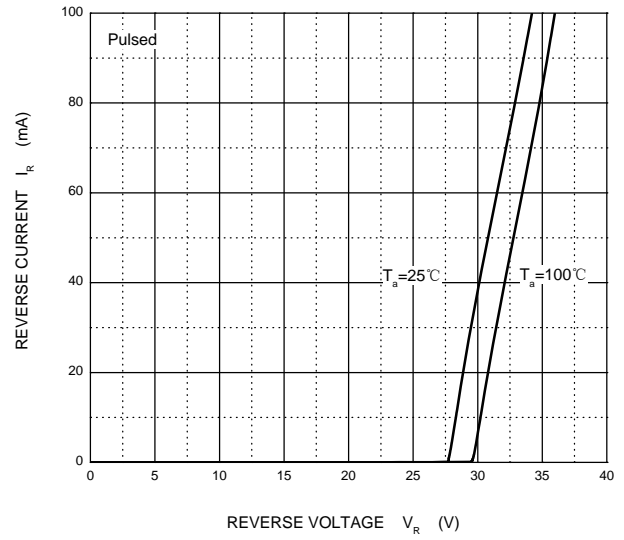
(2). Non-repetitive current pulse 8/20 $\mu\text{s}$  exponential decay waveform according to IEC61000-4-5

## Typical Characteristics

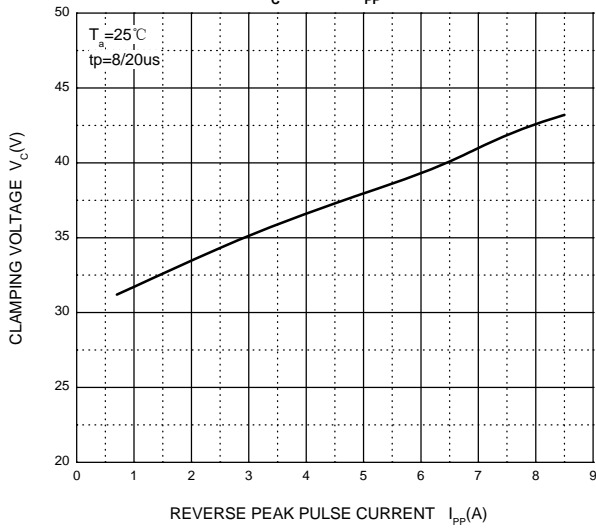
**Forward Characteristics**



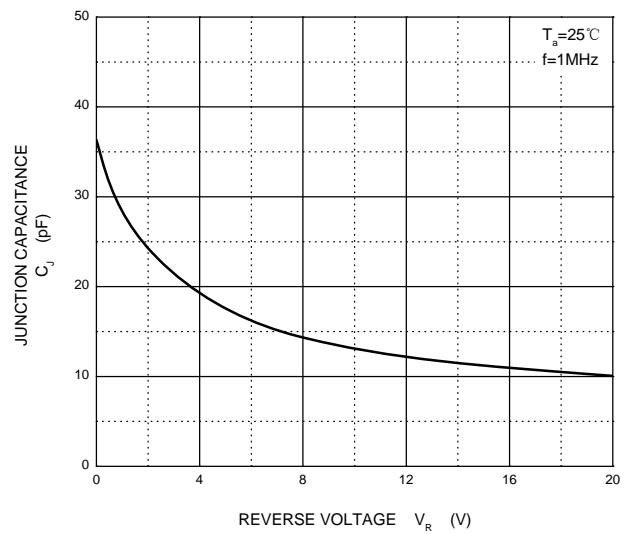
**Reverse Characteristics**



**$V_C$  —  $I_{PP}$**



**Capacitance Characteristics**





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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