



Micro Commercial Components



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

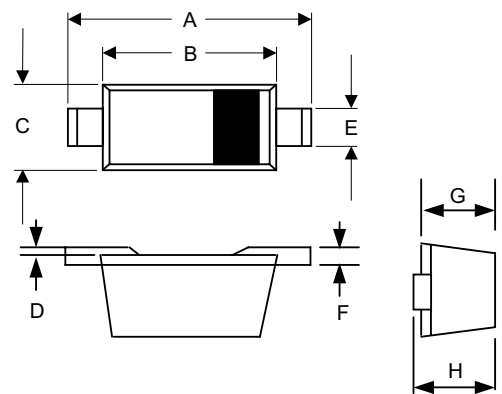
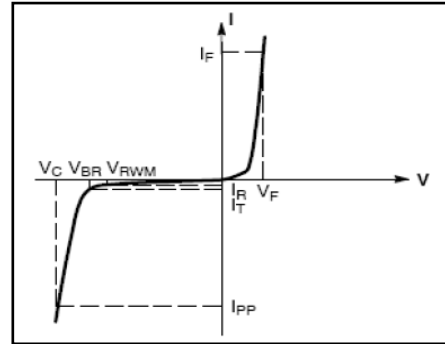


Table titled DIMENSIONS with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows list dimensions A through H.

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)

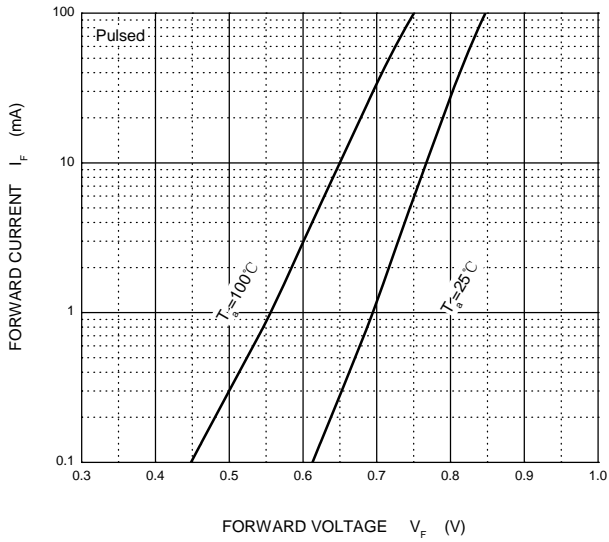
| Parameter | mbol | Test conditions | Min | Typ | Max | Unit |
|---------------------------|-----------------|--------------------------------|------|-----|-----|---------------|
| Reverse stand off voltage | $V_{RWM}^{(1)}$ | | | | 24 | V |
| Reverse leakage current | I_R | $V_{RWM}=24\text{V}$ | | | 1 | μA |
| 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.

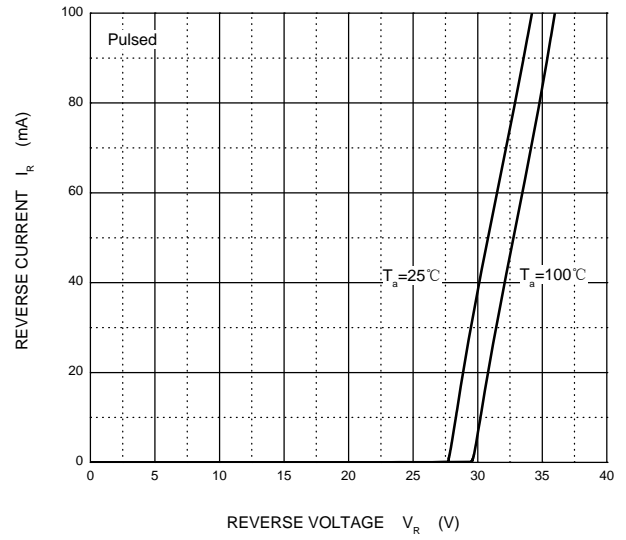
(2).Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5

Typical Characteristics

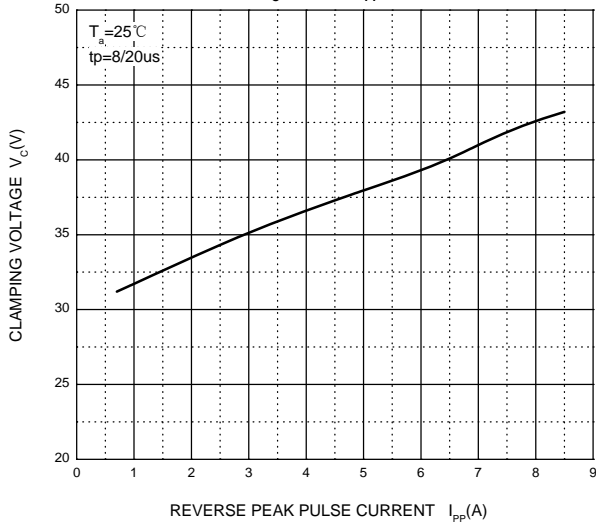
Forward Characteristics



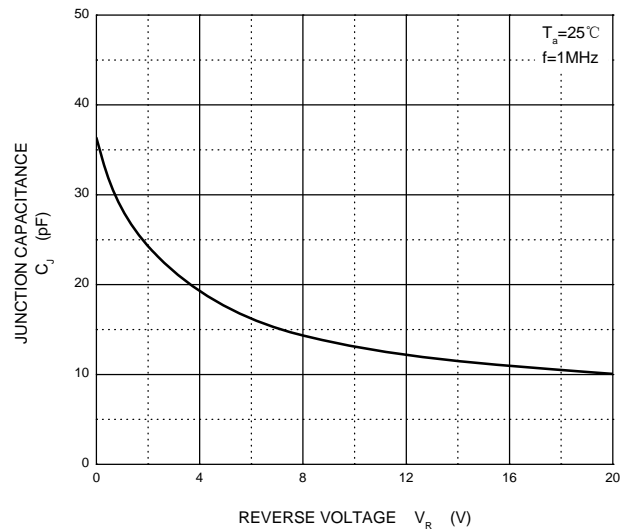
Reverse Characteristics



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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