

APPEARANCE



SOD-323

PIN CONFIGURATION



Pin configuration (Top view)

Descriptions

The APES5.0H24-32 is a Uni-directional transient voltage suppressor (TVS) to protect sensitive electronic components from electrostatic discharge (ESD). It is particularly well-suited for cellular phones, PMP , MID, PDA, digital cameras and other electronic quipment. The APES5.0H24-32 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ($\pm 30KV$).

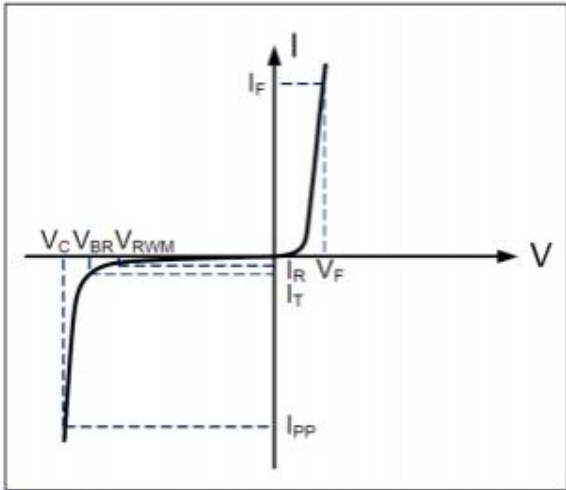
The APES5.0H24-32 is available in SOD-323 package. Standard products are Pb-free and Halogen-free.

Order information

| Device | Package | Shipping |
|---------------|---------|----------------|
| APES5.0H24-32 | SOD-323 | 3000/Tape&Reel |

Electrical Parameters (T=25°C)

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



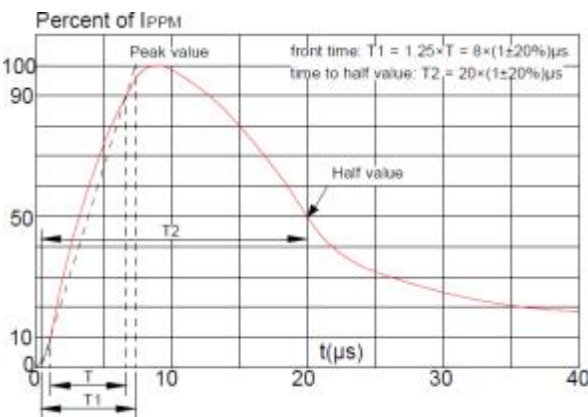
Absolute maximum ratings

| Parameter | Symbol | Rating | Unit |
|---|------------------|---------|------|
| Peak pulse power (tp = 8/20μs) | Ppk | 360 | W |
| Peak pulse current (tp = 8/20μs) | I _{PP} | 24 | A |
| ESD according to IEC61000-4-2 air discharge | V _{ESD} | ±30 | kV |
| ESD according to IEC61000-4-2 contact discharge | | ±30 | kV |
| Junction temperature | T _J | 150 | °C |
| Operating temperature | T _{OP} | -55~125 | °C |
| Storage temperature | T _{STG} | -55~150 | °C |

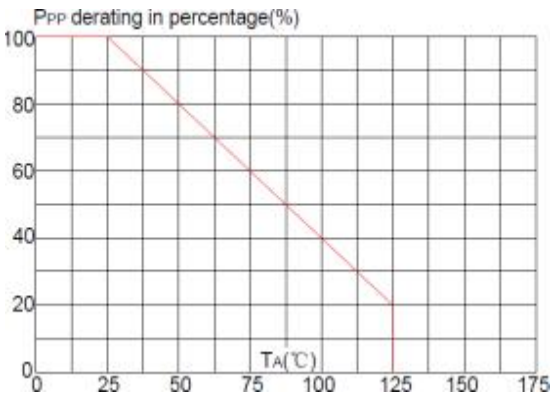
Electronics characteristics (Ta=25°C)

| Parameter | Symbol | Condition | Min | Typ | Max | Units |
|---------------------------|----------------|---------------------------------|-----|------|-----|-------|
| Reverse Stand-off Voltage | VRWM | | | | 5.0 | V |
| Reverse Breakdown Voltage | VBR | I _t =1mA | 5.8 | 7.05 | 8.2 | V |
| Reverse Leakage Current | I _R | VRWM=5.0V | | | 0.8 | uA |
| Clamping Voltage | VC | I _{pp} =24A, tp=8/20us | | | 15 | V |
| Junction Capacitance | C _j | VR=0V, f=1MHz | | 165 | | pF |

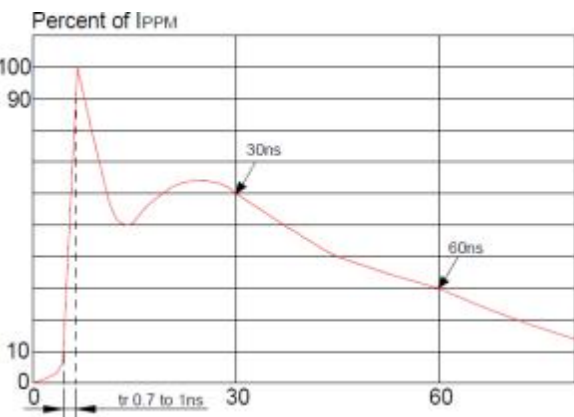
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

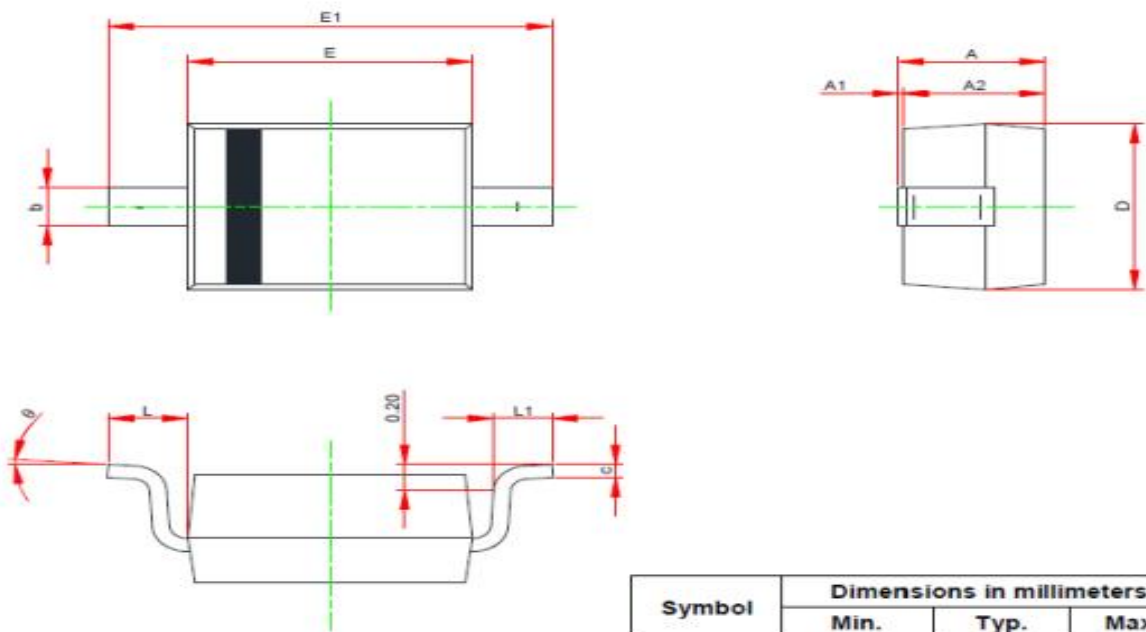


Pulse Derating Curve



ESD Clamping(8kV Contact Discharge)

PACKAGE OUTLINE DIMENSIONS(SOD-323)



| Symbol | Dimensions in millimeters | | |
|--------|---------------------------|------|-------|
| | Min. | Typ. | Max. |
| A | 0.800 | - | 1.000 |
| A1 | 0.000 | - | 0.100 |
| A2 | 0.800 | - | 0.900 |
| b | 0.250 | - | 0.350 |
| c | 0.080 | - | 0.150 |
| D | 1.200 | - | 1.400 |
| E | 1.600 | - | 1.800 |
| E1 | 2.500 | - | 2.700 |
| L | 0.475 REF | | |
| L1 | 0.250 | - | 0.400 |
| θ | 0° | - | 8° |

Recommend land pattern (Unit: mm)



Note:
This recommended land pattern is for reference purpose only.