

**APPEARANCE**



SOD-323

**PIN CONFIGURATION**



Pin configuration (Top view)

**Descriptions**

The APES7.0H100-32 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 APES7.0H100-32 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ( $\pm 30KV$ ).

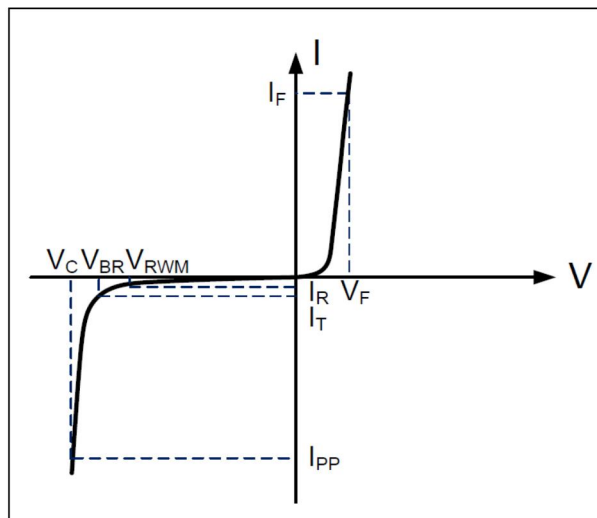
The APES7.0H100-32 is available in SOD-323 package. Standard products are Pb-free and Halogen-free.

**Order information**

Device	Package	Shipping
APES7.0H100-32	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 @ $I_F$



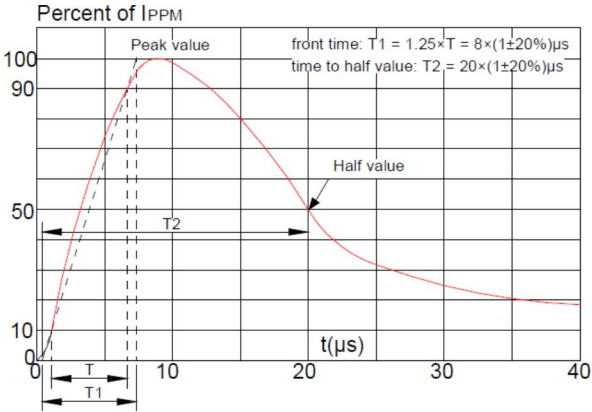
**Absolute maximum ratings**

Parameter	Symbol	Rating	Unit
Peak pulse power (tp = 8/20μs)	Ppk	2000	W
Peak pulse current (tp = 8/20μs)	I <sub>PP</sub>	35	A
ESD according to IEC61000-4-2 air discharge	V <sub>ESD</sub>	±30	kV
ESD according to IEC61000-4-2 contact discharge		±30	kV
Junction temperature	T <sub>J</sub>	150	°C
Operating temperature	T <sub>OP</sub>	-55~125	°C
Storage temperature	T <sub>STG</sub>	-55~150	°C

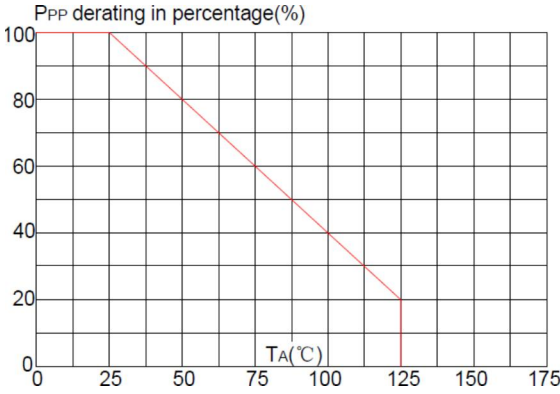
**Electronics characteristics (Ta=25°C)**

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-off Voltage	VRWM				7.0	V
Reverse Breakdown Voltage	VBR	I <sub>t</sub> =1mA	7.4	8.5	9.1	V
Reverse Leakage Current	I <sub>R</sub>	VRWM=7.0V			0.8	uA
Clamping Voltage	V <sub>C</sub>	I <sub>pp</sub> =100A, t <sub>p</sub> =8/20us			22	V
Junction Capacitance	C <sub>j</sub>	VR=0V, f=1MHz		690		pF

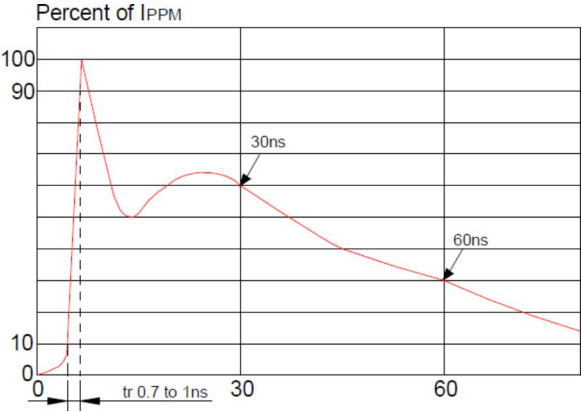
**Typical characteristics (Ta=25°C)**



**Pulse Waveform (8/20us)**

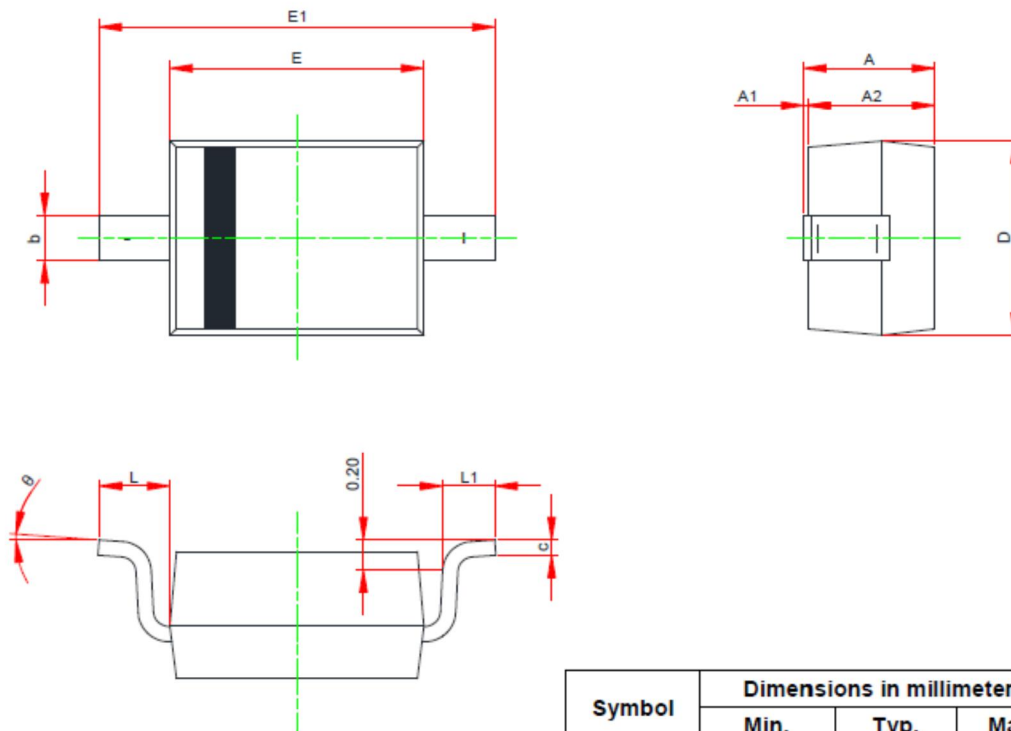


**Pulse Derating Curve**



**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.