

APPEARANCE



SOD123

PIN CONFIGURATION



Pin configuration (Top view)

Descriptions

The APES5.0H100-12 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 equipment. The APES5.0H100-12 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ($\pm 30KV$).

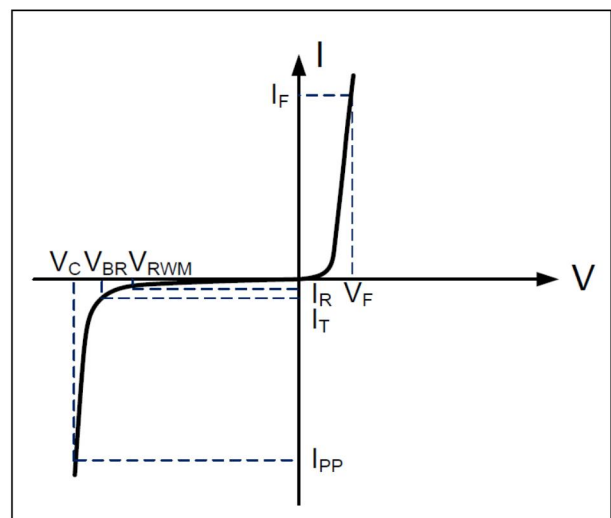
The APES5.0H100-12 is available in SOD-123 package. Standard products are Pb-free and Halogen-free.

Order information

Device	Package	Shipping
APES5.0H100-12	SOD-123	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



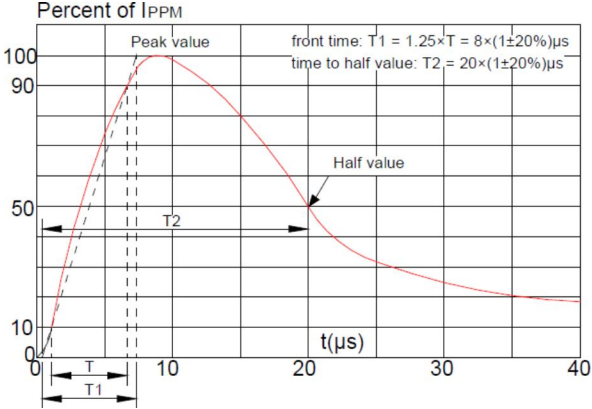
Absolute maximum ratings

Parameter	Symbol	Rating	Unit
Peak pulse power (tp = 8/20μs)	Ppk	1700	W
Peak pulse current (tp = 8/20μs)	I _{PP}	100	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

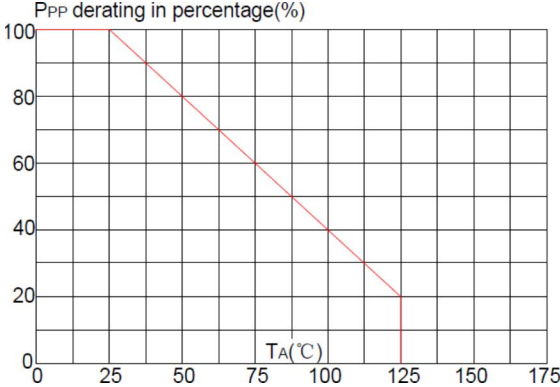
Electronics characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-off Voltage	VRWM				5.0	V
Reverse Breakdown Voltage	VBR	I _t =1mA	5.8	6.7	8.2	V
Reverse Leakage Current	I _R	VRWM=5.0V			0.8	uA
Clamping Voltage	VC	I _{pp} =100A, tp=8/20us			17	V
Junction Capacitance	C _j	VR=0V, f=1MHz		930		pF

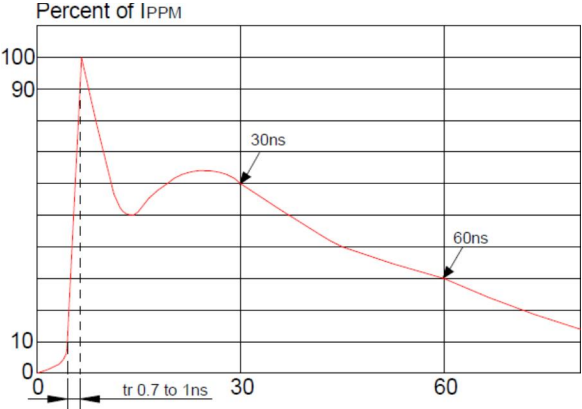
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

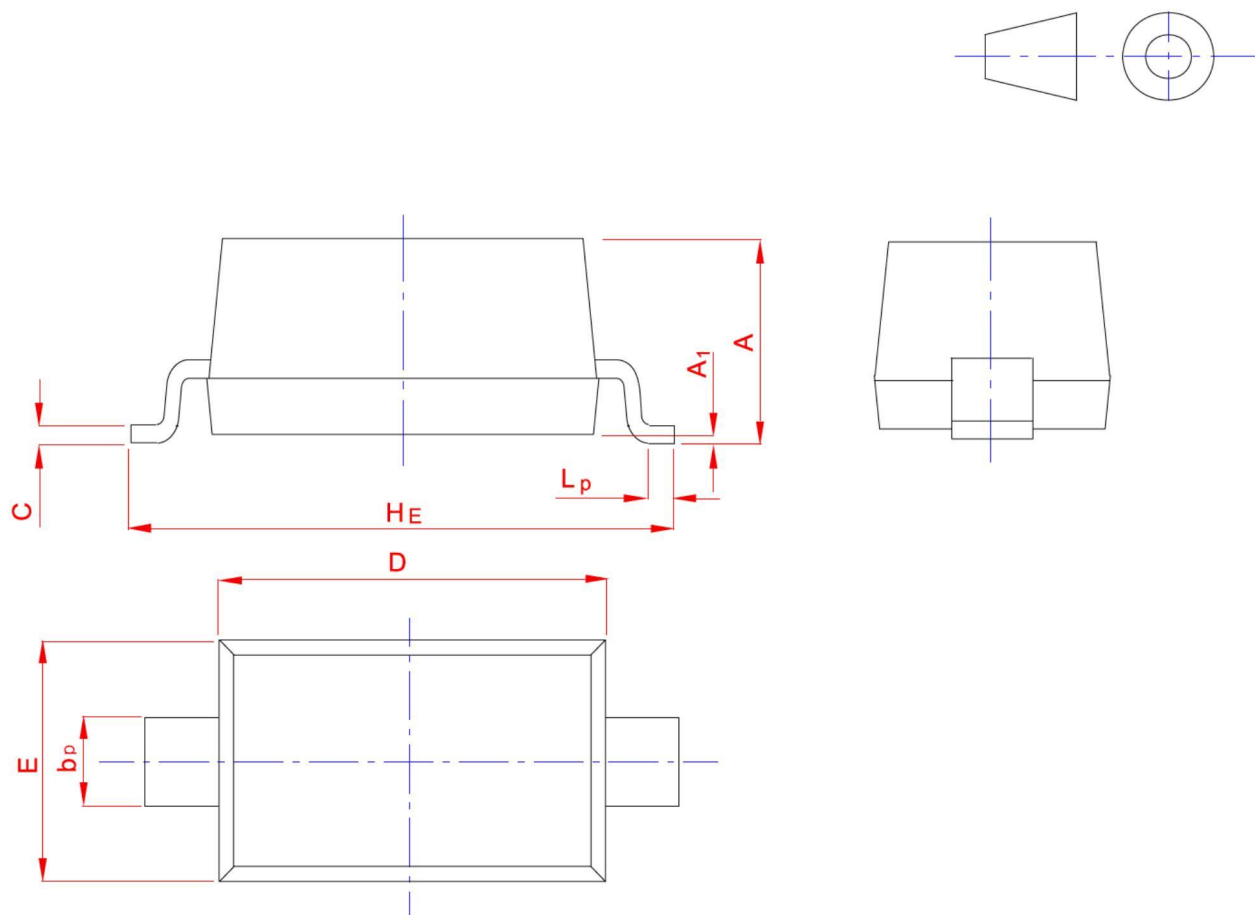


Pulse Derating Curve



ESD Clamping(8kV Contact Discharge)

PACKAGE OUTLINE DIMENSIONS(SOD-123)



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20

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