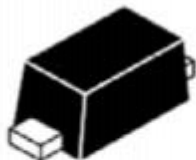


APPEARANCE



SOD-523 (Top View)

PIN CONFIGURATION



Pin configuration (Top view)

Descriptions

The APES20H8.0-52 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 APES20H8.0-52 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ($\pm 30KV$).

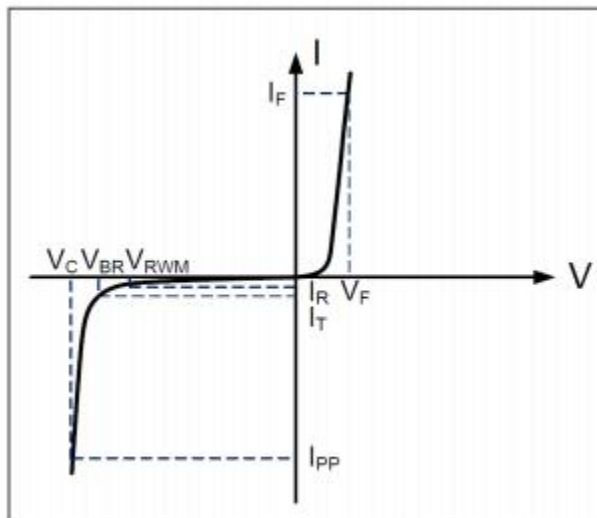
The APES20H8.0-52 is available in SOD-523 package. Standard products are Pb-free and Halogen-free.

Order information

Device	Package	Shipping
APES20H8.0-52	SOD-523	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



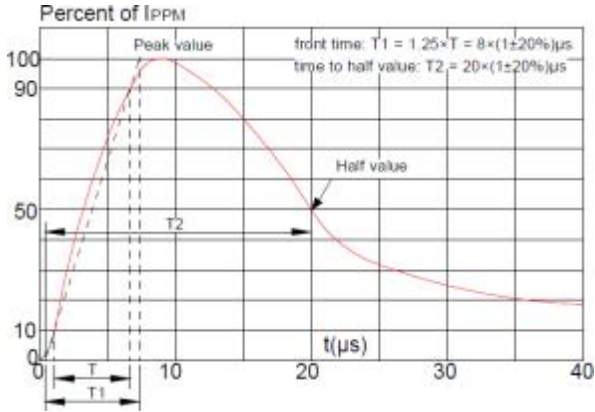
Absolute maximum ratings

Parameter	Symbol	Rating	Unit
Peak pulse power (tp = 8/20μs)	Ppk	280	W
Peak pulse current (tp = 8/20μs)	I _{PP}	8.0	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

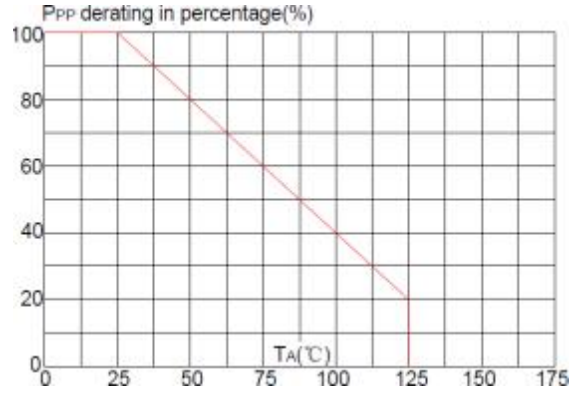
Electronics characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-off Voltage	VRWM				20	V
Reverse Breakdown Voltage	VBR	I _t =1mA	20	22	26	V
Reverse Leakage Current	I _R	VRWM=20V			0.1	uA
Clamping Voltage	V _C	I _{pp} =8.0A, t _p =8/20us			35	V
Junction Capacitance	C _j	VR=0V, f=1MHz		58		pF

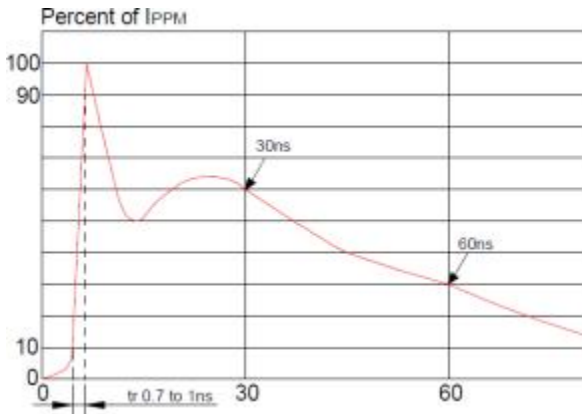
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

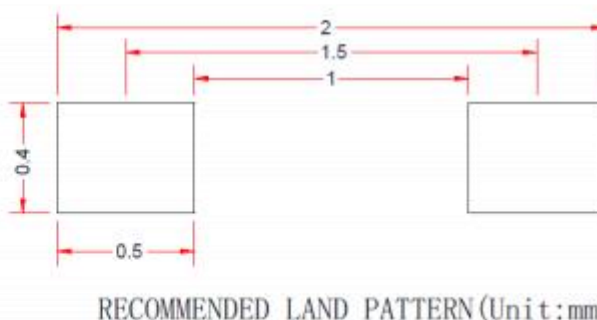
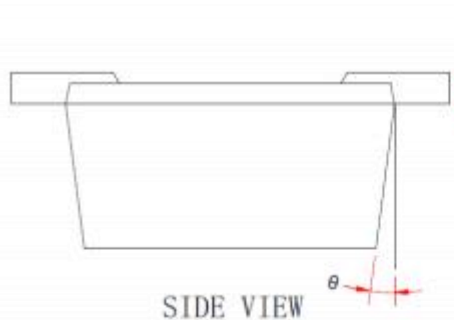
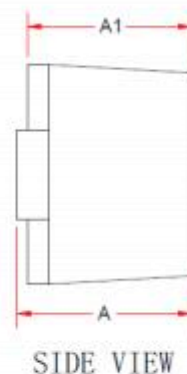
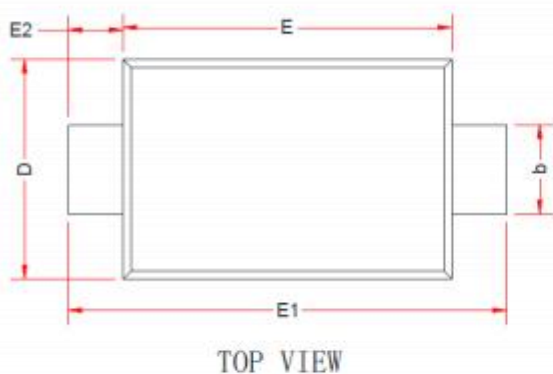


Pulse Derating Curve



ESD Clamping(8kV Contact Discharge)

PACKAGE OUTLINE DIMENSIONS(SOD-523)



Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.51	-	0.77
A1	0.50	0.60	0.70
b	0.25	-	0.40
c	0.08	-	0.15
D	0.75	0.80	0.85
E	1.10	1.20	1.30
E1	1.50	1.60	1.70
E2	0.20 Ref.		
θ	7 °C Ref.		

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