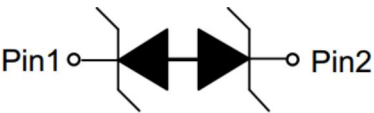


APPEARANCE



SOD-523 (Top View)

PIN CONFIGURATION



Pin configuration (Top view)

Descriptions

The APED5.0H20-52 is a Bi-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 APED5.0H20-52 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ($\pm 30\text{KV}$).

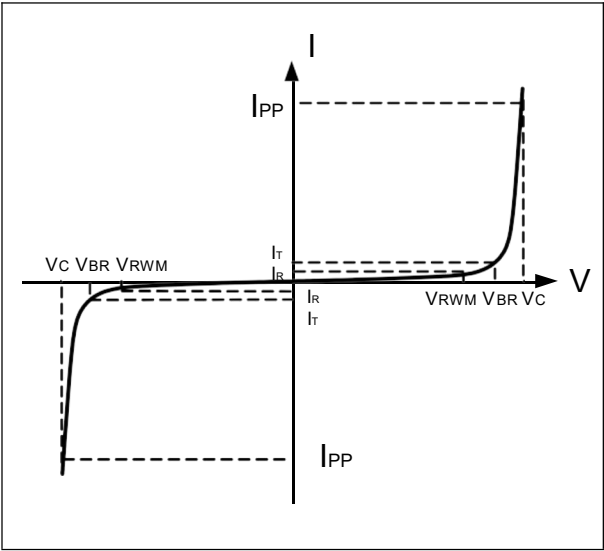
The APED5.0H20-52 is available in SOD-523 package. Standard products are Pb-free and Halogen-free.

Order information

Device	Package	Shipping
APED5.0H20-52	SOD-523	3000/Tape&Reel

Electrical Parameters (T=25°C)

Symbol	Parameter
VRWM	Reverse Stand-off Voltage
IR	Reverse Leakage Current @ VRWM
VBR	Reverse Breakdown Voltage @ IT
IT	Test Current
IPP	Reverse Peak Pulse Current
Vc	Clamping Voltage @ IPP



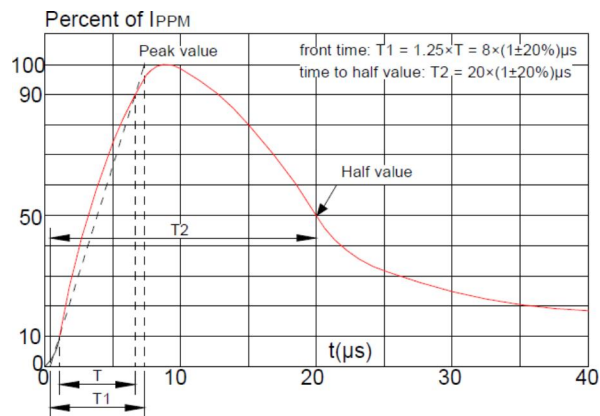
Absolute maximum ratings

Parameter	Symbol	Rating	Unit
Peak pulse power (tp = 8/20μs)	Ppk	290	W
Peak pulse current (tp = 8/20μs)	IPP	20	A
ESD according to IEC61000-4-2 air discharge	VESD	±30	kV
ESD according to IEC61000-4-2 contact discharge		±30	kV
Junction temperature	TJ	150	℃
Operating temperature	TOP	-55~125	℃
Storage temperature	TSTG	-55~150	℃

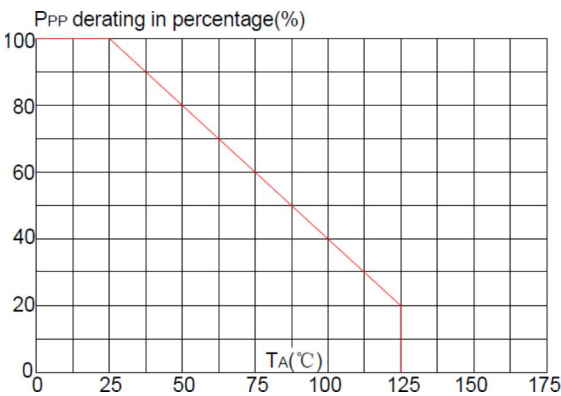
Electronics characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-off Voltage	VRWM				5.0	V
Reverse Breakdown Voltage	VBR	It=1mA	5.6	6.1	8.0	V
Reverse Leakage Current	IR	VRWM=±5.0V			0.2	uA
Clamping Voltage	VC	Ipp=20A,tp=8/20us			15	V
Junction Capacitance	Cj	VR=0V,f=1MHz		45		pF

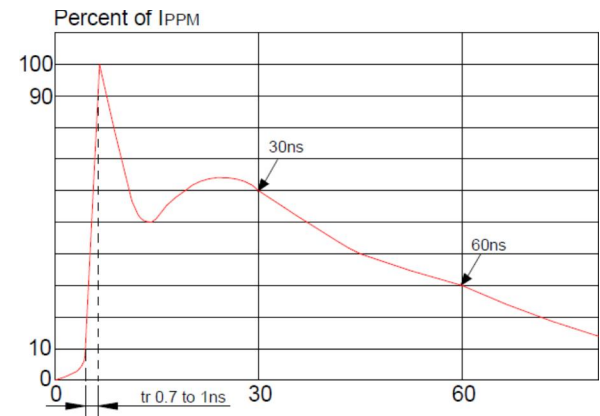
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

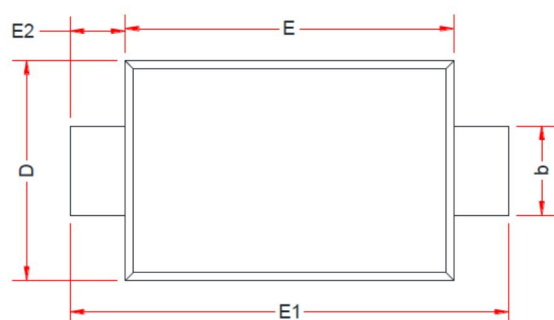


Pulse Derating Curve

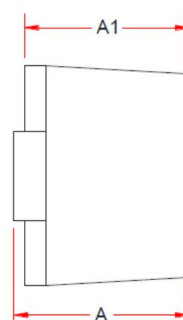


ESD Clamping(8kV Contact Discharge)

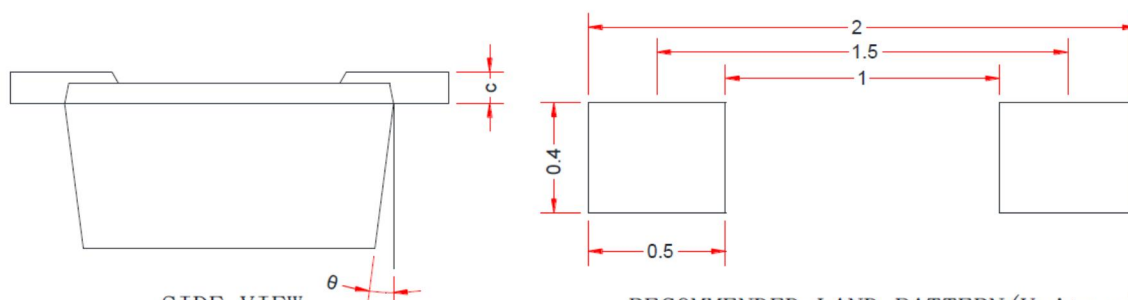
PACKAGE OUTLINE DIMENSIONS(SOD-523)



TOP VIEW



SIDE VIEW



SIDE VIEW

RECOMMENDED LAND PATTERN (Unit:mm)

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.