

Features

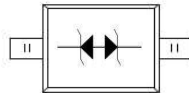
180W peak pulse power (8/20 μ s)
 Protects one data or power line
 Ultra low leakage: nA level
 Operating voltage: 24V
 Ultra low clamping voltage
 Complies with following standards:
 – IEC 61000-4-2 (ESD) immunity test
 Air discharge: ± 20 kV
 Contact discharge: ± 15 kV
 – IEC61000-4-4 (EFT) 40A (5/50ns)
 RoHS Compliant

Mechanical Characteristics

Package: SOD-323
 Lead Finish: Matte Tin
 Case Material: "Green" Molding Compound.
 UL Flammability Classification Rating 94V-0
 Moisture Sensitivity: Level 3 per J-STD-020
 Terminal Connections: See Diagram Below

Applications

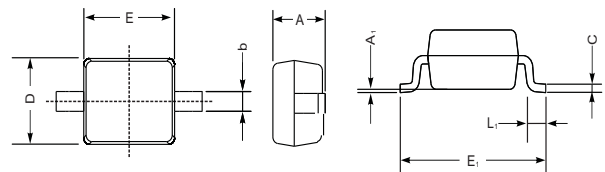
Cellular Handsets and Accessories
 Personal Digital Assistants
 Notebooks and Handhelds
 Portable Instrumentation
 Peripherals
 Pagers Peripherals



Ordering information

Order code	Package	Making
PESD24VL1BA	SOD-323	AF

SOD323



UNIT		A	C	D	E	E ₁	b	L ₁	A ₁
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—
mil	max	43	5.9	55	70	108	16	16	8
	min	32	3.1	47	63	100	9.8	7.9	—

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 20	kV
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

PESD24VL1BA

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			24	V	
Breakdown Voltage	VBR	26			V	IT = 1mA
Reverse Leakage Current	IR			0.1	μA	VRWM = 24V
Clamping Voltage	VC		33		V	I _{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	VC			60	V	I _{PP} = 3.5A (8 x 20μs pulse)
Peak Pulse Current	I _{PP}			3.5	A	tp=8/20μs
Junction Capacitance	CJ		10		pF	VR = 0V, f = 1MHz

RATING AND CHARACTERISTIC CURVES (PESD24VL1BA)

ig1. 8/20 μ s Pulse Waveform

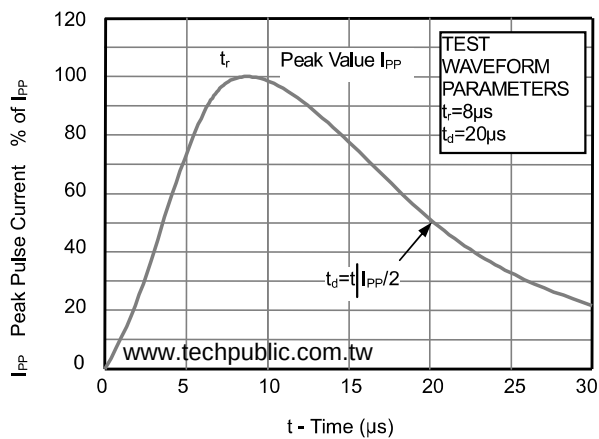
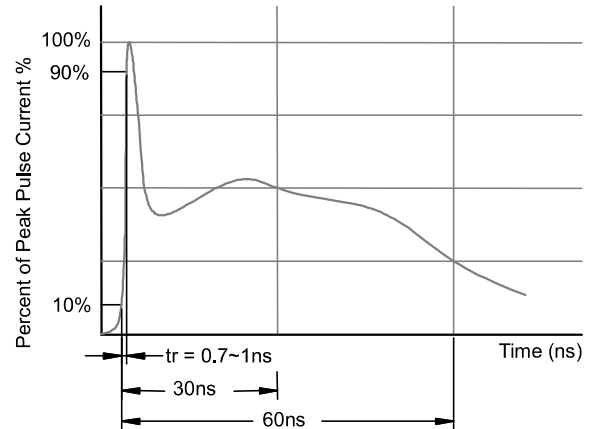


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)



ig3 Power Derating Curve

