

Features

- IEC 61000-4-2 (ESD) $\pm 30\text{KV}$ (Air)
 $\pm 30\text{KV}$ (contact)
IEC 61000-4-4 (EFT): 80A (5/50ns)
- 750 Watts Peak Pulse Power per (tp=8/20 μs)
- Protects one I/O line (Unidirectional)
- Working voltages: 5V,7V,10V,12V,15V,18V,24V
- Low leakage current

Description

The S0531LE series is designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers , printers, business machines , communication systems, medical equipment and other applications. These device is ideal for situations where board space is at a premium.

This series has been specifically designed to protect sensitive components which are connected to power data and transmission lines from overvoltage caused by ESD (electrostatic discharge),CDE (Cable Discharge Events),and EFT (electrical fast transients).

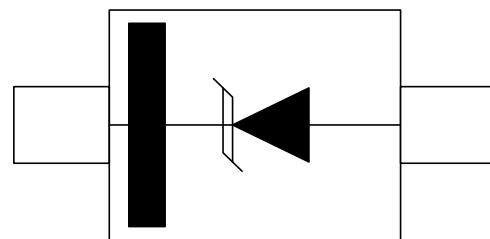
Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

Mechanical Characteristics

- SOD-323FL package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed: 260°C/10S
- Reel size: 7 inch

Pin Configuration



SOD-323FL
(Top View)

Package Outline



SOD-323 Flat LEAD

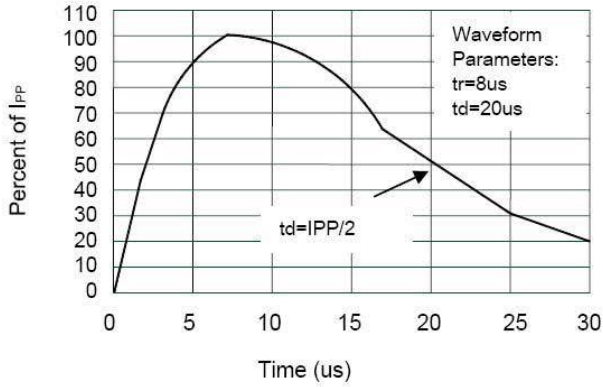
Absolute Maximum Rating

Symbol	Parameter	Value	Units
V _{ESD}	ESD per IEC 61000-4-2 (Air)	±30	kV
	ESD per IEC 61000-4-2 (Contact)	±30	
P _{PP}	Peak Pulse Power (8/20μs)	750	W
T _{OPT}	Operating Temperature	-55/+150	°C
T _{STG}	Storage Temperature	-55/+150	°C
TL	Lead Soldering Temperature	260 (10 sec.)	°C

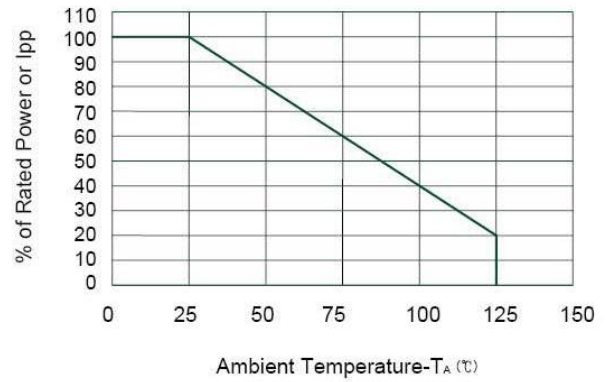
Electrical Characteristics (T=25 °C)

PART NUMBER	DEVICE MARKING	V _{RWM}	V _B	I _T	V _{C@5A}	V _C		I _R	C _T
		(V) (max.)	(V) (min.)	(mA)	(V) (max.)	(V) (max.) (@A)		(μA) (max.)	(pF) (typ.)
S0531LE	S53E	5	6	1	9.8	11	15	0.1	360
S0731LE	S73E	7	7.5	1	9.8	12	15	0.1	360
S1031LE	SA3E	10	10.6	1	13.9	15	18	0.1	232
S1231LE	SB3E	12	13.3	1	19	25	20	0.1	157
S1531TE	SC3E	15	16.7	1	24	30	22	0.1	121
S1831LE	SD3E	18	20.4	1	30.5	32	19	0.1	121
S2431LE	SE3E	24	26.7	1	40	45	16	0.1	121

■ Typical characteristic curves

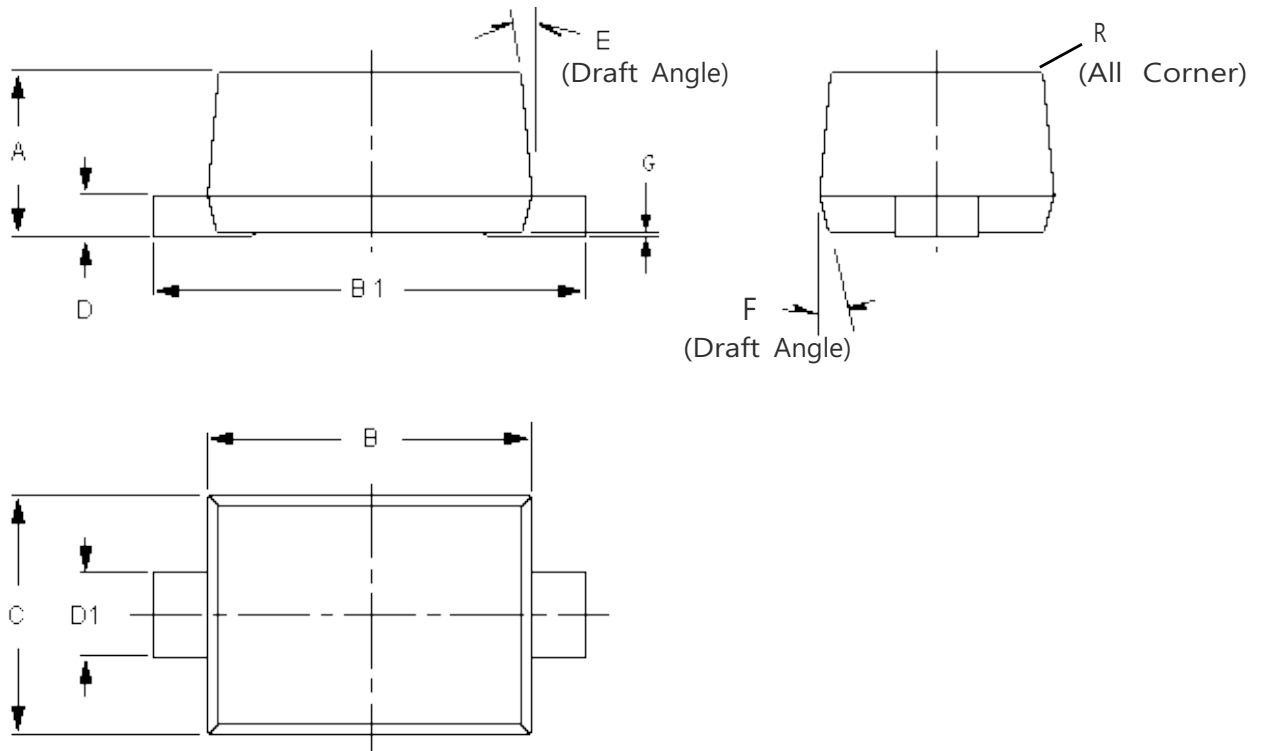


Pulse Waveform



Power Derating Curve

■ Outline



Symbol	Dim in mm		
	Min	Nom	Max
A	0.700	0.800	0.900
B	1.650	1.700	1.750
B1	2.550	2.600	2.750
C	1.250	1.300	1.350
D	0.090	0.100	0.110
D1	0.280	0.300	0.320
E	7°	8°	9°
F	9°	10°	11°
G	0.000	-	0.020
R	0.020	-	0.050

Mold Surface roughness: < 4μm

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