



SBLCxxCI Series

Bidirectional Ultra Low Capacitance TVS Array

Description

The SBLCxxCI Series are ultra low capacitance transient voltage suppressor arrays, designed to protect applications such as portable electronics and SMART phones. This series is available in bidirectional configurations and is rated at 350 Watts for an 8/20 μ s waveshape.

The SBLCxxCI Series meets IEC 61000-4-2 (ESD) and IEC 61000-4-4 (EFT) requirements. At higher operating frequencies or faster edge rates, insertion loss and signal integrity are a major concern. This series offers a ultra low capacitance and low leakage current in a miniature SOD-323 package.

Features

- Transient protection for high-speed data lines
- IEC61000-4-2 (ESD) ± 30 kV (air), ± 30 kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Protects one I/O line (bidirectional)
- Low clamping voltage
- Working voltages : 3V, 5V, 8V, 12V, 15V, 18V, 20V, 24V, 36V
- Low leakage current
- Response Time is < 1 ns

Mechanical Data

- SOD-323 package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed: 260°C/10s
- Reel size: 7 inch
- MSL1

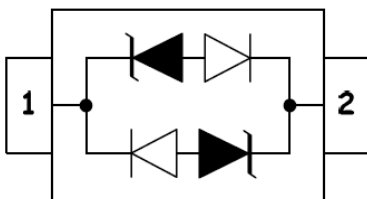
Ordering Information

- Device: SBLCxxCI
- Package: SOD-323
- Material: Halogen free
- Packing: Tape & Reel
- Quantity per reel: 3,000pcs

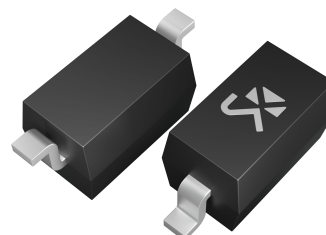
Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Peripherals
- USB Interface

Pin Configuration



Package Outline





SBLCxxCI Series

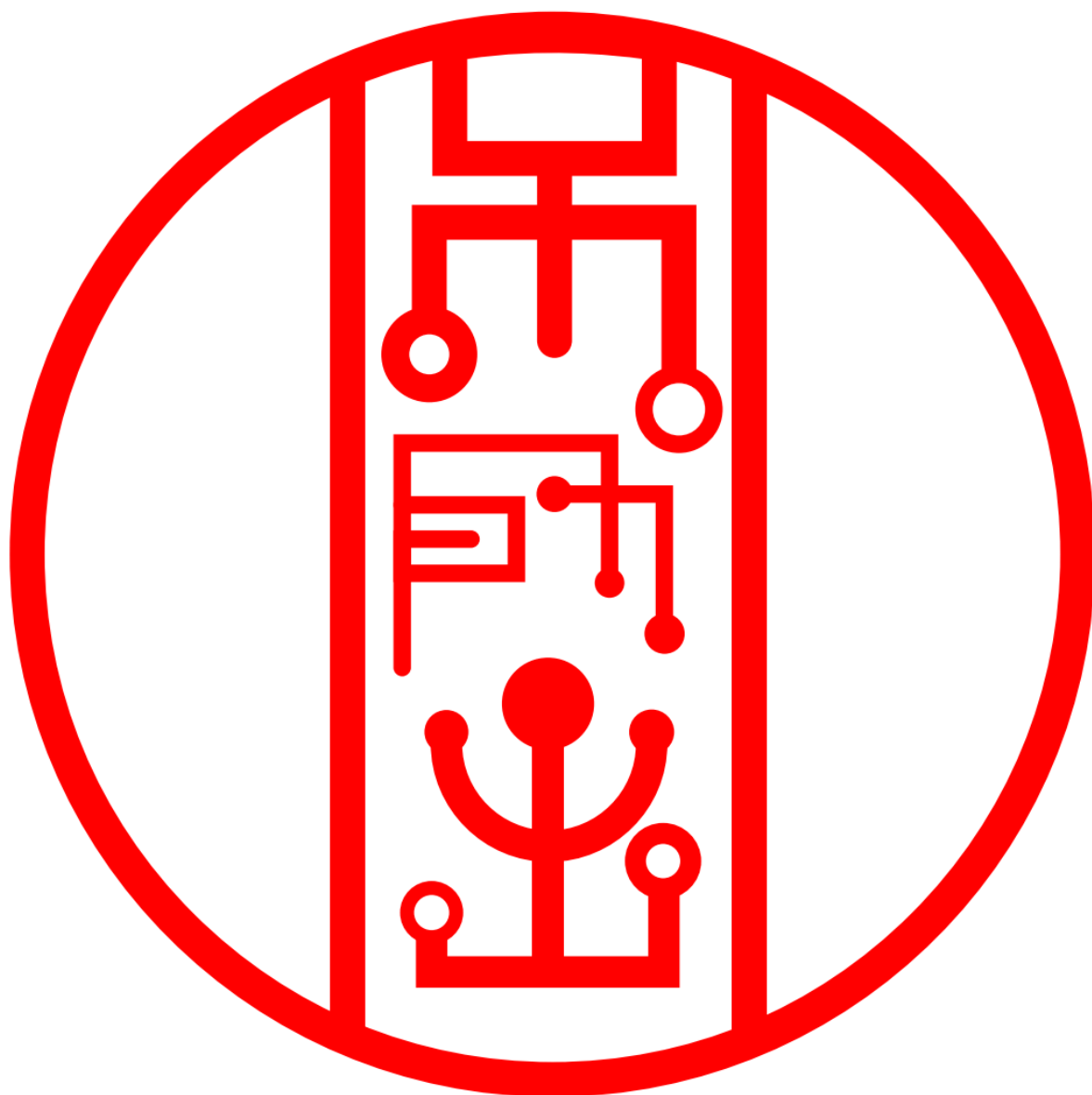
Absolute Maximum Rating

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 30 ± 30	kV
P_{PP}	Peak Pulse Power (8/20 μ s)	350	W
T_{OPT}	Operating Temperature	-55/+150	°C
T_{STG}	Storage Temperature	-55/+150	°C
T_L	Lead Soldering Temperature	260	°C

Electrical Characteristics($T_{amb}=25^{\circ}C$)

PART NUMBER	DEVICE MARKING	V_{RWM} (V)	$V_B@1mA$ (V)	$V_C@1A$ (V)	$V_C@I_{pp}$ (V)		$V_C@I_{pp}$ (V)		I_R (μA)	C_T (pF)
		Max	Min	Max	Max	I_{pp} (A)	Max	I_{pp} (A)	Max	Typ.
SBLC03CI	CC	3.0	4.0	7.0	13.9	8	20.0	20	5	0.8
SBLC05CI	AC	5.0	6.0	9.8	18.3	8	20.0	18	1	0.8
SBLC08CI	BC	8.0	8.5	13.4	18.5	8	24.0	18	1	0.8
SBLC12CI	DC	12.0	13.3	19.0	24.0	6	28.6	12	1	0.8
SBLC15CI	EC	15.0	16.7	24.0	29.0	5	31.8	10	1	0.8
SBLC18CI	FC	18.0	20.0	35.0	45.0	5	53.0	7	1	0.8
SBLC20CI	GC	20.0	22.0	38.0	45.0	4	55.0	7	1	0.8
SBLC24CI	HC	24.0	26.7	43.0	45.0	3	56.0	6	1	0.8
SBLC36CI	IC	36.0	40.0	60.0	65.0	2	75.0	4.5	1	0.8

Electrical Characteristics Curve



SOD-323 Package Outline Dimensions

