

Bi-directional Ultra Low Capacitance TVS Array
FEATURES

- Protects one I/O line (bidirectional)
- Low clamping voltage
- Working voltages : 5V, 8V, 12V, 15V, 18V, 20V, 24V
- Low leakage current
- Response Time is < 1 ns

APPLICATIONS

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

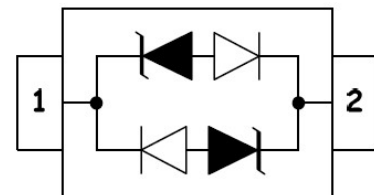
MECHANICAL DATA

- Case : Molded, plastic SOD-323
- Polarity : Shown follows
- Epoxy : UL94-V0 rated flame retardant

IEC COMPATIBILITY

- IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 12A (8/20 μs)

SOD-323 PACKAGE

SCHEMATIC & PIN CONFIGURATION

DESCRIPTION

- The SEBLCxxCI 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 both unidirectional and bidirectional configurations and is rated at 350 Watts for an 8/20 μs wave shape.
- The SEBLCxxCI and 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.



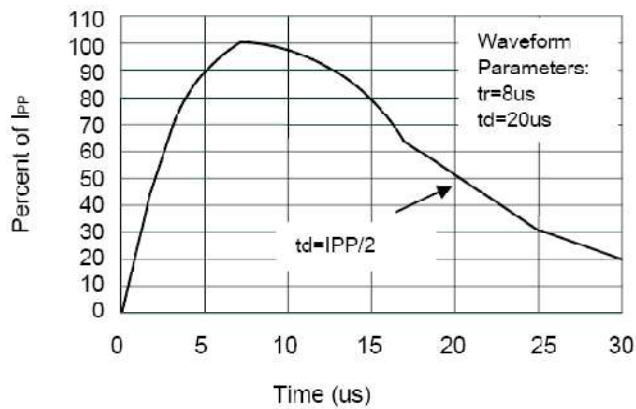
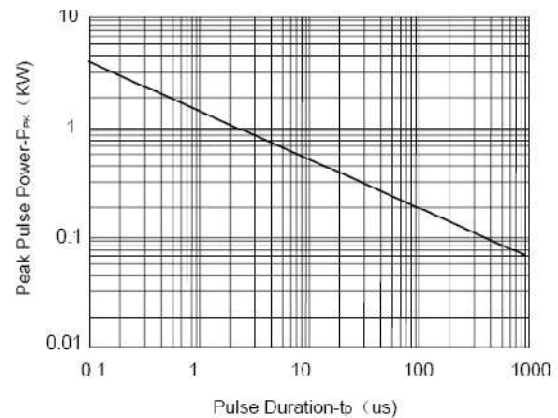
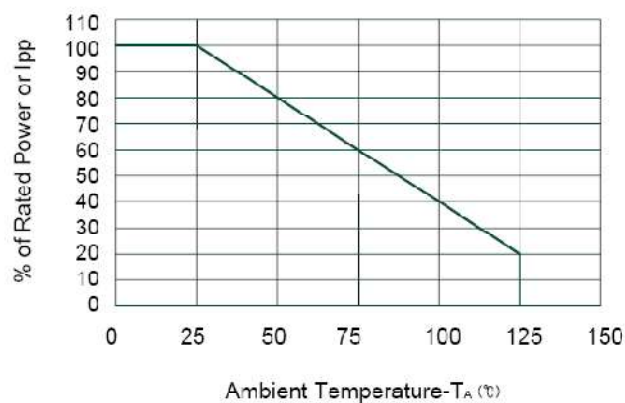
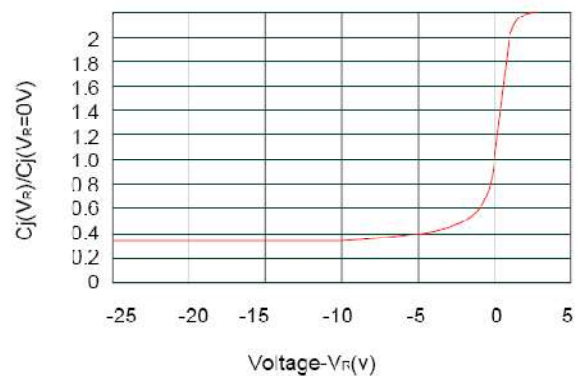
Bi-directional Ultra Low Capacitance TVS Array

ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 15 ± 8	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

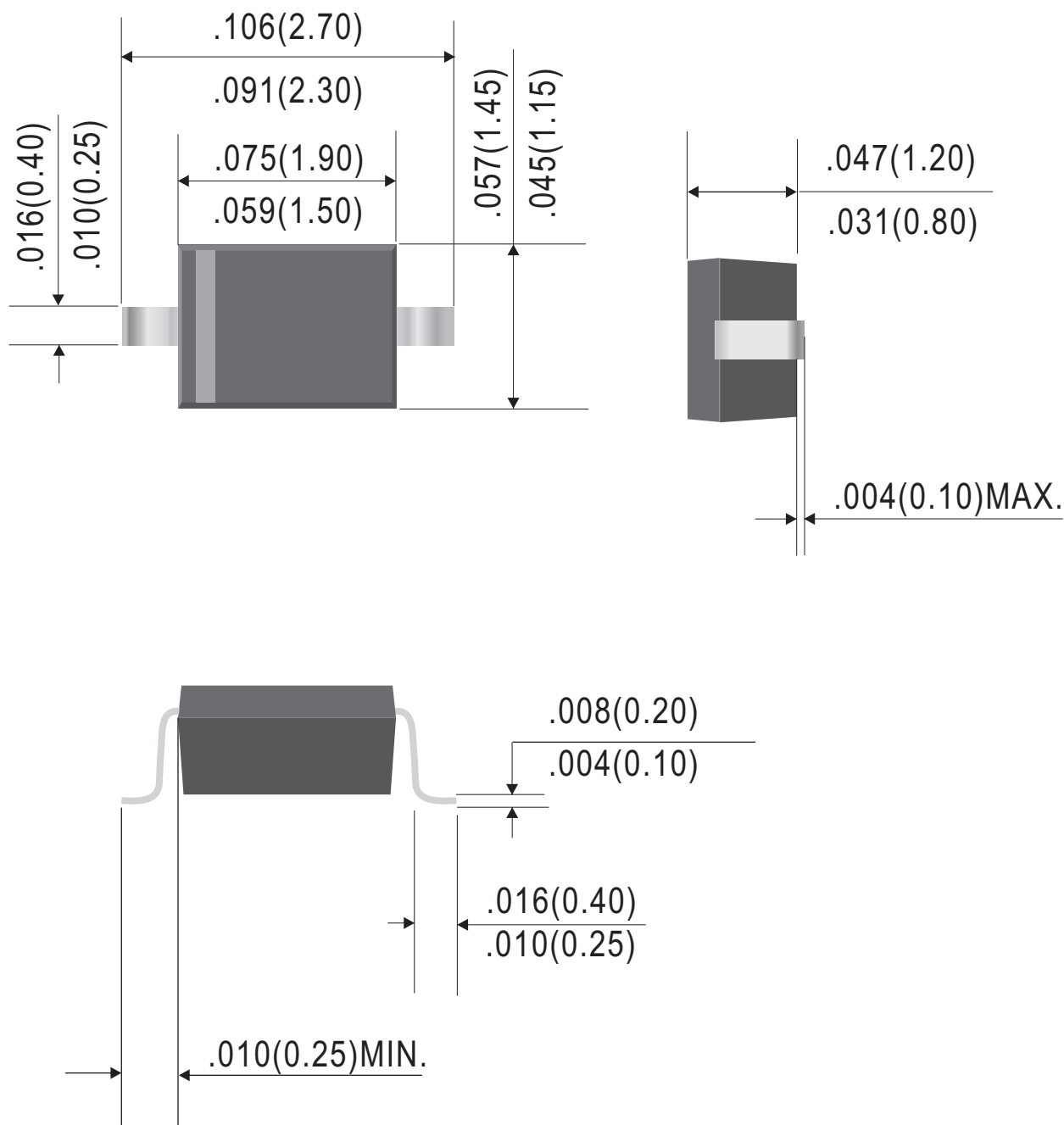
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$)

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.
SEBLC05CI	AC	5.0	6.0	9.8	18.3	8	20.0	18	1	0.8
SEBLC08CI	BC	8.0	8.5	13.4	18.5	8	24.0	18	1	0.8
SEBLC12CI	DC	12.0	13.3	19.0	24.0	6	28.6	12	1	0.8
SEBLC15CI	EC	15.0	16.7	24.0	29.0	5	31.8	10	1	0.8
SEBLC18CI	FC	18.0	20.0	35.0	45.0	5	53.0	7	1	0.8
SEBLC20CI	GC	20.0	22.0	38.0	45.0	4	55.0	7	1	0.8
SEBLC24CI	HC	24.0	26.7	43.0	45.0	3	56.0	6	1	0.8

Bi-directional Ultra Low Capacitance TVS Array
ELECTRICAL CHARACTERISTICS CURVE

Pulse Waveform

Non-Repetitive Peak Pulse Power vs. Pulse Time

Power Derating Curve

Junction Capacitance vs. Reverse Voltage

Outline Drawing

SOD-323



Dimensions in inches and (millimeters)

Rev.D

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

*****Disclaimer*****

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

This is the preliminary specification. WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.