

DESCRIPTION

The UESDxx and UESDxxC Series are transient voltage suppressor arrays designed for ESD protection of SMART phones, laptop computers and other portable electronics. These silicon based diodes offer superior clamping voltage and performance compared to other technologies such as MLVs.

The UESDxx and UESDxxC Series can be utilized as a single line protector in either a unidirectional or bidirectional configuration. The SOD-323 small package configuration offers designers the flexibility of placement on the printed circuit board for each I/O port or voltage bus. The UESDxx and UESDxxC Series meets the IEC 61000-4-2 (ESD), 61000-4-4 (EFT) and 61000-4-5 requirements.



FEATURES

- >350 Watts Peak Pulse Power per Line (tp=8/20μs)
- >Protects One Power or I/O Port
- >Low clamping voltage
- >Working voltages: 3V, 5V, 8V, 12V, 15V, 24V,36V
- >Low leakage current

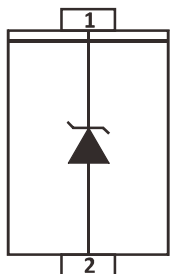
APPLICATIONS

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

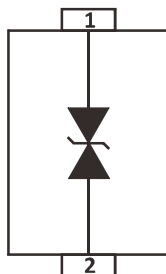
IEC COMPATIBILITY

- >IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)

PIN CONFIGURATIONS



UNIDIRECTIONAL
UESDxx



BIDIRECTIONAL
UESDxx(C)

TYPICAL DEVICE CHARACTERISTICS

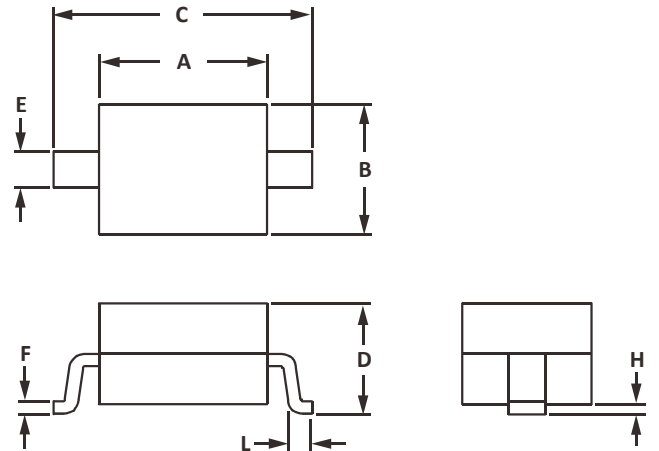
MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	300	Watts
Lead Soldering Temperature	T _L	260(10 sec.)	°C
Operating Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED									
PART NUMBER	DEVICE MARKING	V _{RWM} (V) Max.	V _B (V) Min.	I _T (mA)	V _C @1A Max.	V _C		I _R (µA) Max.	C _T (pF) Typ.
						Max.	@A		
UESD03	03W	3.3	4.0	1	6.50	10.9	30.0	40	500
UESD05	05W	5.0	6.0	1	9.80	13.5	24.0	10	350
UESD08	08W	8.0	8.5	1	13.40	21.0	18.0	10	150
UESD12	12W	12.0	13.3	1	19.00	25.9	15.0	1	120
UESD15	15W	15.0	16.7	1	24.00	30.0	12.0	1	100
UESD24	24W	24.0	26.7	1	43.00	48.0	8.0	1	80
UESD36	36W	36.0	40.0	1	60.00	75.0	5.0	1	30
UESD03C	2A	3.3	4.0	1	7.50	16.0	25.0	200	350
UESD05C	2B	5.0	6.0	1	9.80	17.0	24.0	10	260
UESD08C	2C	8.0	8.5	1	13.40	20.0	18.0	5	120
UESD12C	2D	12.0	13.3	1	19.00	25.0	13.0	1	110
UESD15C	2J	15.0	16.7	1	24.00	30.0	6.0	1	100
UESD24C	2H	24.0	26.7	1	43.00	52.0	6.0	1	75
UESD36C	2N	36.0	40.0	1	60.00	75.0	4.0	1	35

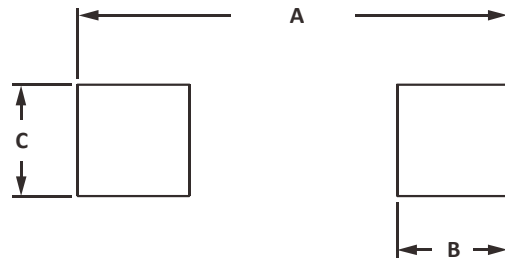
1. UESDXX part number to specify Uni-directional devices.
2. UESDXX(C) Add suffix 'C' after part number to specify Bi-directional devices.

SOD-323 PACKAGE INFORMATION

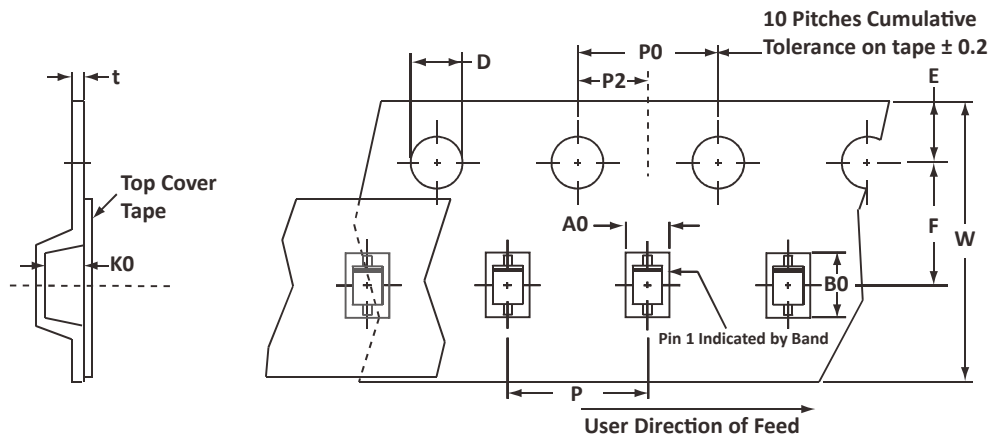
OUTLINED DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-



PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036



TAPE AND REEL



SPECIFICATIONS												
REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	1.55 ± 0.10	2.90 ± 0.10	1.35 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25
NOTES 1. Dimensions are in millimeters. 2. Surface mount product is taped and reeled in accordance with EIA-481. 3. Suffix - T7 = 7" Reel - 3,000 pieces per 8mm tape. 4. Marking on Part - marking code (see page 2)												

E H M F 9 9 @ . ' \$\$\$ d W g