



**UESDA6V1**

Preliminary

TVS

**4-BIT WIDE MONOLITHIC SUPPRESSOR**

■ DESCRIPTION

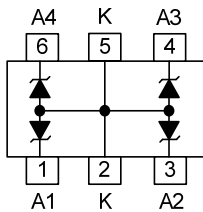
The UTC **UESDA6V1** is a dual monolithic voltage suppressor designed to protect components which are connected to data and transmission lines against ESD.

It clamps the voltage just above the logic level supply for positive transients, and to a diode drop below ground for negative transients. It can also work as bidirectional suppressor by connecting only pin1 and 2.

■ FEATURES

- \* 2 Unidirectional Transil functions
- \* Low leakage current: IR max < 20µA at VBR
- \* 300W peak pulse power(8/20µs)
- \* High ESD protection level: up to 25 kV

■ SYMBOL



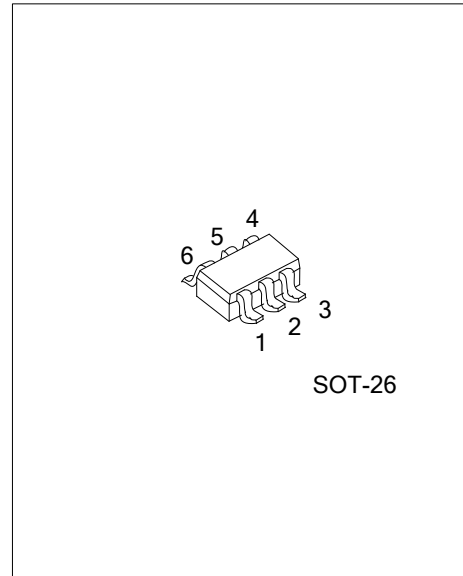
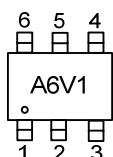
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
UESDA6V1L-AG6-R	UESDA6V1G-AG6-R	SOT-26	A1	K	A2	A3	K	A4	Tape Reel

Note: Pin Assignment: K: Cathode A: Anode

<p>UESDA6V1G-AG6-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) AG6: SOT-26</li> <li>(3) G : Halogen Free and Lead Free, L: Lead Free</li> </ul>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT	
ESD Discharge	IEC61000-4-2	Air Discharge	$\pm 25$	kV	
		Contact Discharge	$\pm 9$	kV	
Peak Pulse Current	IEC61000-4-5	$t_p=8/20 \mu\text{s}$	$I_{PP}$	15	A
Peak Pulse Power			$P_{PK}$	300	W
Operating Junction Temperature		$T_J$	+150	$^\circ\text{C}$	
Operating Temperature		$T_{OPR}$	-55 ~ +125	$^\circ\text{C}$	
Storage Temperature		$T_{STG}$	-55 ~ +150	$^\circ\text{C}$	

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Stand-Off Voltage	$V_{RWM}$	Pin 5 to Pin 2			3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_R=1\text{mA}$ , Pin 5 to Pin 2	6.1		7.2	V
Reverse Current	$I_R$	$V_R=3\text{V}$			1	$\mu\text{A}$
Clamping Voltage (positive transient)	$V_{CL}$	$I_{PP}=15\text{A}$ , $t_p=8/20\mu\text{s}$ , Any Channel pin to Ground			12	V
Diode capacitance	$C_d$	$V_R=0\text{V}$ , $f=1\text{MHz}$		105		pF

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