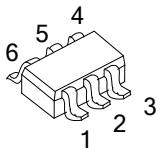
4-BIT WIDE MONOLITHIC SUPPRESSOR



SOT-26

■ DESCRIPTION

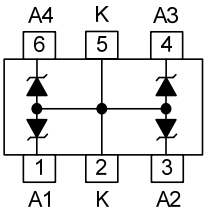
The UTC **UESDA6V1** is a dual monolithic voltage suppressor designed to protect components which are connected to data and transmission lines against ESD.

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 bidirectionnal 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

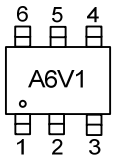
Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
UESDA6V1L-AG6-R	UESDA6V1G-AG6-R	SOT-26	A1	K	A2	A3	K	A4	Tape Reel

Note: Pin Assignment: K: Cathode A: Anode

UESDA6V1G-AG6-R

(1) Packing Type	(1) R: Tape Reel
(2) Package Type	(2) AG6: SOT-26
(3) Green Package	(3) G : Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER			SYMBOL	RATINGS	UNIT
ESD Discharge	IEC61000-4-2	Air Discharge	V_{ESD}	±25	kV
		Contact Discharge		±9	kV
Peak Pulse Current	IEC61000-4-5	t_P=8/20 μs	I_{PP}	15	A
Peak Pulse Power			P_{PK}	300	W
Operating Junction Temperature			T_J	+150	°C
Operating Temperature			T_{OPR}	-55 ~ +125	°C
Storage Temperature			T_{STG}	-55 ~ +150	°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°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=1mA, Pin 5 to Pin 2	6.1		7.2	V
Reverse Current	I_R	V_R=3V			1	μA
Clamping Voltage (positive transient)	V_{CL}	I_{PP}=15A, t_P=8/20μs, Any Channel pin to Ground			12	V
Diode capacitance	C_d	V_R=0V, f=1MHz		105		pF