



UESDA6V1W5

Preliminary

TVS

4-BIT WIDE MONOLITHIC SUPPRESSOR

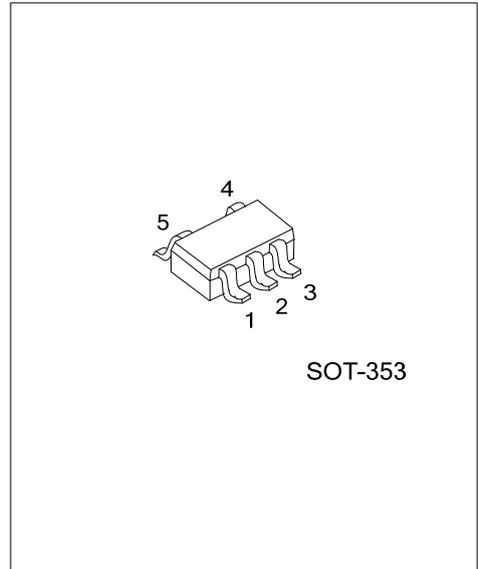
DESCRIPTION

The UTC **UESDA6V1W5** is a 4-bit wide monolithic suppressor, it uses UTC's advanced technology to provide customers with low leakage current and high integration, etc.

The UTC **UESDA6V1W5** is suitable for ESD protection and high density boards.

FEATURES

- * Low leakage current (Max.=1μA)
- * High integration
- * Breakdown voltage (Min.=6.1V)

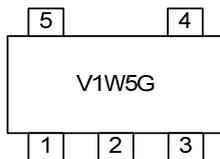


ORDERING INFORMATION

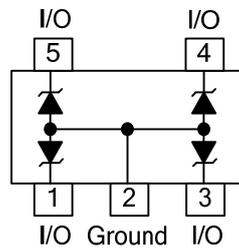
Ordering Number	Package	Packing
UESDA6V1W5G-AL5-R	SOT-353	Tape Reel

<p>UESDA6V1W5L-AL5-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Halogen Free 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) AL5 : SOT-353 (3) L: Lead Free, G: Halogen Free
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MARKING



■ FUNCTIONAL DIAGRAM



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	I/O	Terminal of ESD 1
2	GND	Ground
3	I/O	Terminal of ESD 2
4	I/O	Terminal of ESD 3
5	I/O	Terminal of ESD 4

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

PARAMETER		SYMBOL	RATINGS	UNIT
ESD Discharge	IEC1000-4-2	Air Discharge	15	kV
		Contact Discharge	8	kV
Peak Pulse Power (8/20 μs)		V_{PP}	150	W
Operating Junction Temperature		T_J	125	$^{\circ}\text{C}$
Operating Temperature (Note 2)		T_{OPR}	-40~+125	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-55~+150	$^{\circ}\text{C}$

Notes: 1. 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.

2. The values of operating parameters versus temperature are given through curve and αT parameter.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Stand-Off Voltage	V_{RM}				3	V
Breakdown Voltage	V_{BR}	$I_R=1\text{mA}$	6.1		7.2	V
Leakage Current	I_{RM}	$V_{RM}=3\text{V}$			1	μA
Voltage Temperature Coefficient (Note 2)	αT				6	$10^{-4}/^{\circ}\text{C}$
Capacitance Per Line	C	0V Bias		90		pF
Dynamic Resistance (Note 1)	R_d			350		m Ω
Forward Voltage Drop	V_F	$I_F=200\text{mA}$			1.25	V

Notes: 1. Square pulse $I_{PP}=15\text{A}$, $t_p=2.5\mu\text{s}$.

2. $\Delta V_{BR}=\alpha T \times (T_A-25^{\circ}\text{C}) \times V_{BR}(25^{\circ}\text{C})$.

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