



UESD5V0U1B-L

TVS

ESD PROTECTION DIODE

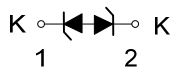
DESCRIPTION

The UTC **UESD5V0U1B-L** is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time provide best in class protection on designs that are exposed to ESD. Because of its small size, it is suited for use in cellular phones, MP3 players, digital cameras and many other portable applications where board space comes at a premium.

FEATURES

- * Low Capacitance < 0.5 pF
- * Low Clamping Voltage
- * Stand-off Voltage: 5 V
- * IEC61000-4-2(ESD) : Air mode 30kV / Contact mode 30KV

SYMBOL



ORDERING INFORMATION

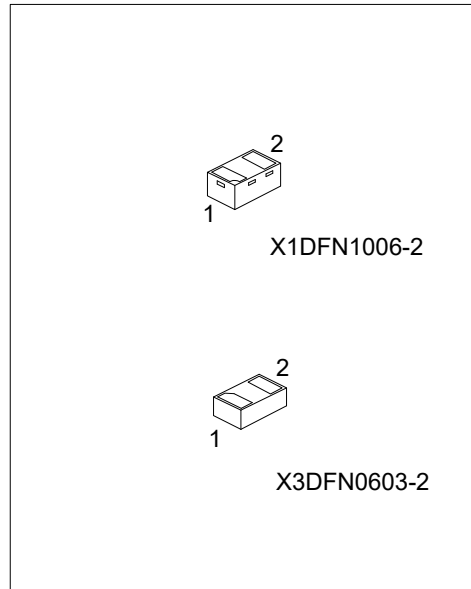
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
UESD5V0U1BL-KAQ-R	UESD5V0U1BG-KAQ-R	X3DFN0603-2	K	K	Tape Reel
UESD5V0U1BL-KAA-R	UESD5V0U1BG-KAA-R	X1DFN1006-2	K	K	Tape Reel

Note: Pin Assignment: K: Cathode

<p>UESD5V0U1BG-CB2-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) CB2: SOT-323, KAQ: X3DFN0603-2 KAA: X1DFN1006-2 (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING

X3DFN0603-2	X1DFN1006-2



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

PARAMETER		SYMBOL	RATINGS	UNIT	
ESD Discharge	IEC61000-4-2	Air Discharge	±30	kV	
		Contact Discharge	±30	kV	
Peak Pulse Current	IEC61000-4-5	t _p =8/20μs	I _{PP}	4	A
Peak Pulse Power			P _{PK}	60	W
Operating Junction Temperature		T _J	-55 ~ +150	°C	
Storage Temperature		T _{STG}	-55 ~ +150	°C	

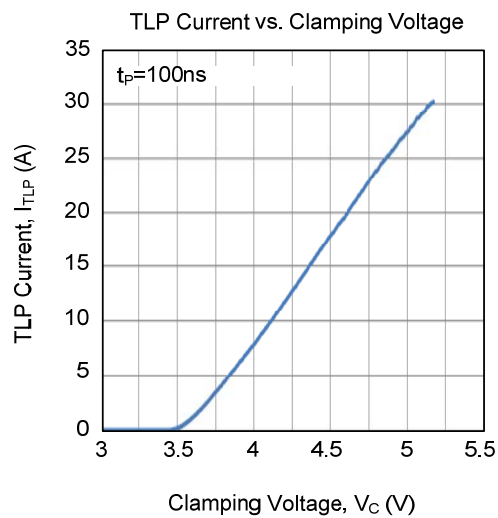
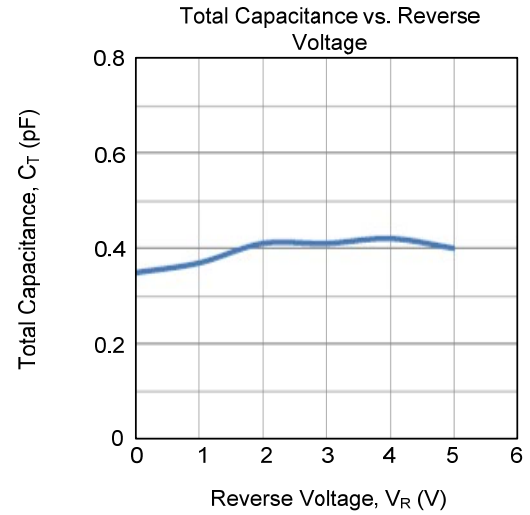
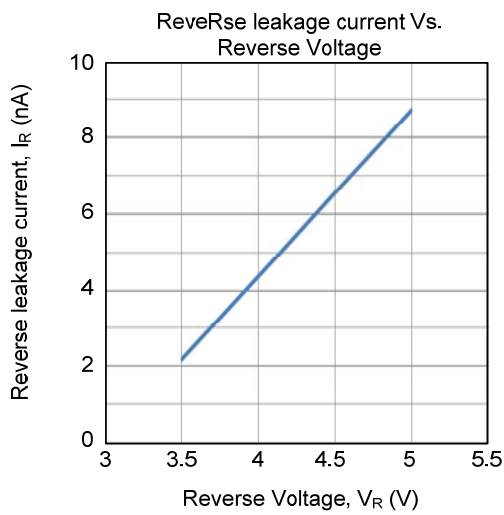
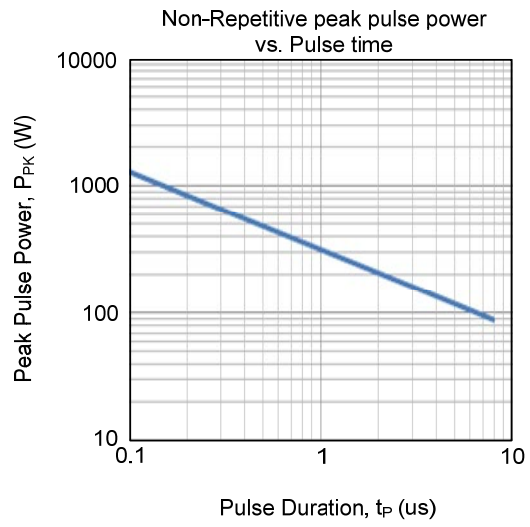
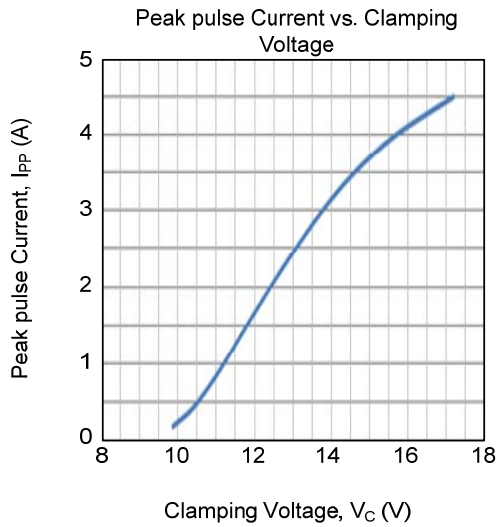
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Stand-Off Voltage	V _{RWM}				5.0	V
Reverse Breakdown Voltage	V _{BR}	I _R =1mA	6		10	V
Reverse Current	I _R	V _R =5.0V			100	nA
Diode capacitance	C _D	V _R =0V, f=1MHz			0.5	pF
Clamping Voltage (positive transient)	V _{CL}	I _{PP} =1.0A, t _p =8/20μs (Note)			12	V
		I _{PPM} =4.0A, t _p =8/20μs (Note)			17	V

Note: Device stressed with 8/20 μs exponential decay waveform according to IEC 61000-4-5.

■ TYPICAL CHARACTERISTICS



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