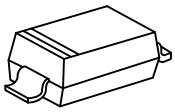
UESD5V0X1C40

Preliminary ***TVS***

ULTRA LOW CLAMPING BI-DIRECTIONAL ESD TRANSIENT PROTECTION DIODE



SOD-323

■ DESCRIPTION

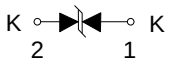
The UTC **UESD5V0X1C40** is ultra-low clamping ESD transient bidirectional protection diode, it uses UTC's advanced technology to provide customers with low leakage current and high integration, etc.

The UTC **UESD5V0X1C40** is suitable for ESD protection and high density boards.

■ FEATURES

* 350 Watts peak pulse power (8/20μs)
* Unidirectional Configuration
* Solid state silicon-avalanche technology
* Low clamping voltage
* Low leakage current

■ SYMBOL



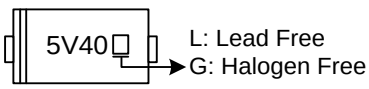
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
UESD5V0X1C40L-CB2-R	UESD5V0X1C40G-CB2-R	SOD-323	K	K	Tape Reel

Note: Pin Assignment: K: Cathode A: Anode

UESD5V0X1C40G-CB2-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) CB2: SOT-323 (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}	±30	kV
		Contact Discharge		±15	kV
Peak Pulse Current	IEC61000-4-5	t_P=8/20 μs	I_{PP}	20	A
Peak Pulse Power			P_{PK}	350	W
Operating Junction Temperature			T_J	-55 ~ +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}				5.0	V
Reverse Breakdown Voltage	V_{BR}	I_R=1mA	6.0			V
Reverse Current	I_R	V_R=5.0V			1.0	μA
Clamping Voltage (positive transient)	V_{CL}	I_{PP}=20A, t_P=8/20μs, Any Channel pin to Ground			21	V
Diode capacitance	C_d	V_R=0V, f=1MHz			40	pF