



SMAXXV

TVS DIODE FOR ESD PROTECTION

SURFACE MOUNT SILICON ZENER DIODE

DESCRIPTION

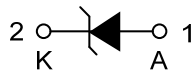
The UTC **SMAXXV** is a single line TVS diode, for ESD protection.

The UTC **SMAXXV** is protection in portable electronics applications.

FEATURES

- * 50 Watts peak pulse power (tp=8/20μs)
- * Transient protection for data lines to
 - ESD=8KV (Contact)
 - EFT=40A (tp=5/50ns)
 - Lightning=5A (tp=8/20μs)
- * Small package for use in portable electronics.
- * Suitable replacement for Multi-Layer Varistors in ESD protection applications.
- * Protects on I/O or power line.
- * Low clamping voltage.
- * Low leakage current.

SYMBOL



ORDERING INFORMATION

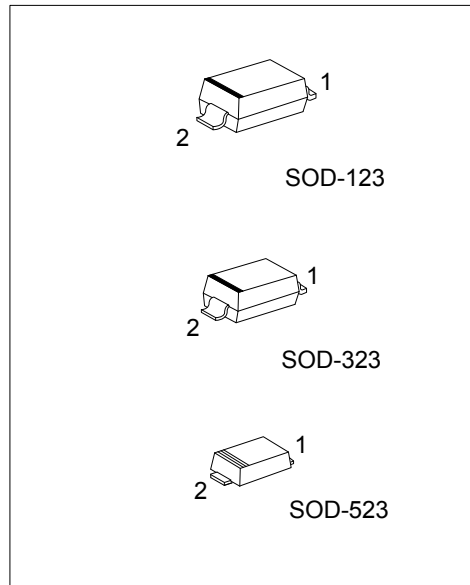
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SMAXXVL-CA2-R	SMAXXVG-CA2-R	SOD-123	A	K	Tape Reel
SMAXXVL-CB2-R	SMAXXVG-CB2-R	SOD-323	A	K	Tape Reel
SMAXXVL-CC2-R	SMAXXVG-CC2-R	SOD-523	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>SMAXXVG-CA2-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package (4) Output Voltage</p>	<p>(1) R: Tape Reel (2) CA2: SOD-123, CB2: SOD-323, CC2 : SOD-523 (3) G: Halogen Free and Lead Free, L: Lead Free (4) refer to ELECTRICAL CHARACTERISTICS</p>
--	---

MARKING

SOD-123 / SOD-323	SOD-523



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

PARAMETER		SYMBOL	RATINGS	UNIT
Peak Pulse Power (tp=8/20μs)		P _{PK}	50	W
Peak Pulse Current (tp=8/20μs)		I _{PP}	5	A
Junction Temperature		T _J	-55 ~ +150	°C
Storage Temperature		T _{STG}	-55 ~ +150	°C
ESD Discharge	IEC61000-4-2	Air Discharge	15	kV
		Contact Discharge	8	kV

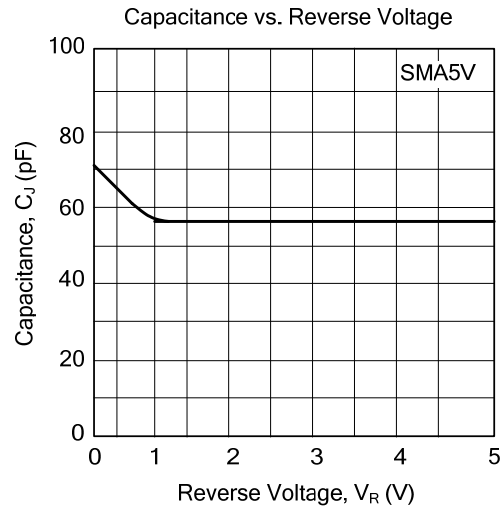
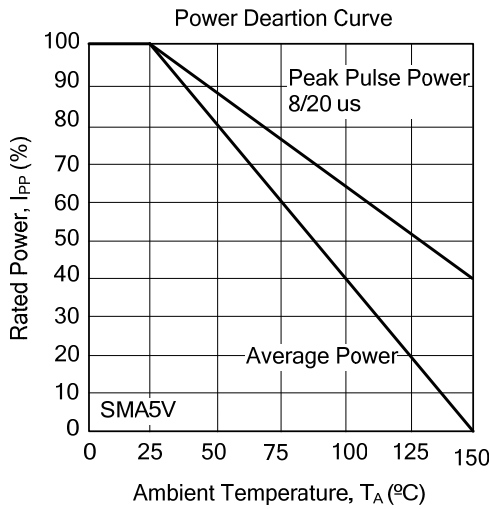
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

(V_F = 0.9V Max @ I_F = 10mA for all types.)

Device	Marking Code	Test Current	Reverse Stand-Off Voltage	Reverse Breakdown Voltage V _{BR} (V)	Reverse Leakage Current I _R (μA)			Clamping Voltage V _C (V)		Junction Capacitance C _J (pF)		
					Min	Max	V _{RWM} (V)	Max (Typ.)	I _{PP} (A)	Max	V _R (V)	f (MHz)
SMA3V	3	1	3.3	4	20	3.3	10.9	5	100	0	1	
SMA5V	5	1	5	6	5	5	14.5	5	80	0	1	
SMA7V	7	1	7	7.5	0.15	7	22.7	8.8	85	0	1	
SMA8V	8	1	8	8.5	5	8	13	5	70	0	1	
SMA12V	12	1	12	13.3	5	12	17	5	60	0	1	
SMA15V	15	1	15	16.6	5	15	22	5	50	0	1	
SMA24V	24	1	24	26.7	5	24	32	3	25	0	1	
SMA36V	36	1	36	40	5	36	55	1	20	0	1	

■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.