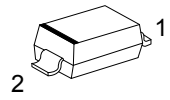
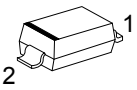
SMAXXV

TVS DIODE FOR ESD PROTECTION

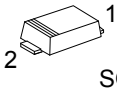
SURFACE MOUNT SILICON ZENER DIODE



SOD-123



SOD-323



SOD-523

■ DESCRIPTION

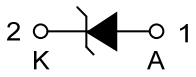
The UTC **SMAXXV** is a single line TVS diode, for ESD protection.

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

SMAXXVG-CA2-R

(1)Packing Type
(2)Package Type
(3)Green Package
(4)Output Voltage

(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

■ MARKING

SOD-123 / SOD-323	SOD-523
Voltage Code ← XXS□ → L: Lead Free, G: Halogen Free	Voltage Code ← XXS□ → L: Lead Free, G: Halogen Free

■ 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	V_{ESD}	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)		
		I_T (mA)	V_{RWM} (V)	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