



SMAXXV

TVS DIODE FOR ESD PROTECTION

SURFACE MOUNT SILICON ZENER DIODE

DESCRIPTION

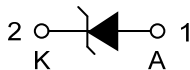
The UTC **SMAXXV** is a single line TVS diode, for ESD protection.

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

FEATURES

- * 50 Watts peak pulse power ($t_p=8/20\mu s$)
- * Transient protection for data lines to
 - ESD=8KV (Contact)
 - EFT=40A ($t_p=5/50ns$)
 - Lightning=5A ($t_p=8/20\mu s$)
- * 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



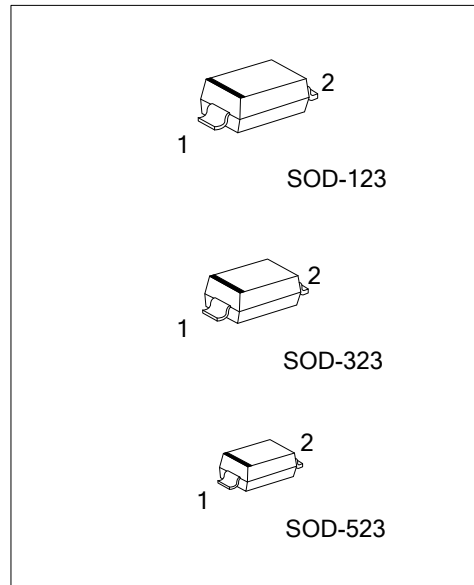
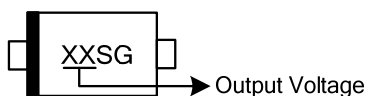
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
SMAXXG-CA2-R	SOD-123	A	K	Tape Reel
SMAXXG-CB2-R	SOD-323	A	K	Tape Reel
SMAXXG-CC2-R	SOD-523	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

SMAXXG-CC2-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 (4) refer to ELECTRICAL CHARACTERISTICS
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MARKING



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

PARAMETER			SYMBOL	RATINGS	UNIT
Peak Pulse Power ($t_p=8/20\mu\text{s}$)			P_{PK}	50	W
Peak Pulse Current ($t_p=8/20\mu\text{s}$)			I_{PP}	5	A
Junction Temperature			T_J	-55~150	$^{\circ}\text{C}$
Storage Temperature			T_{STG}	-55~150	$^{\circ}\text{C}$
ESD Discharge	IEC61000-4-2	Air Discharge	V_{ESD}	15	kV
		Contact Discharge		8	kV

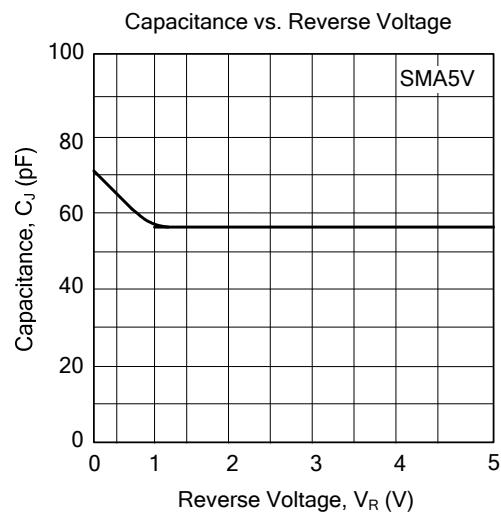
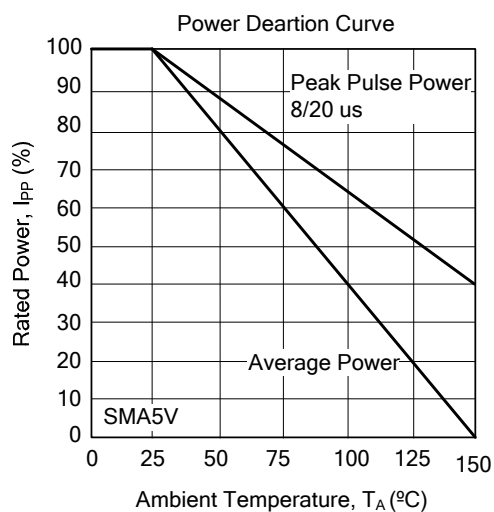
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

($V_F = 0.9\text{V Max @ } I_F = 10\text{mA}$ for all types.)

Device	Marking Code	Test Current	Reverse Stand-Off Voltage	Reverse Breakdown Voltage $V_{BR}(V)$	Reverse Leakage Current $I_R (\mu\text{A})$		Clamping Voltage $V_C (V)$		Junction Capacitance $C_J (\text{pF})$		
		$I_T (\text{mA})$	$V_{RWM} (V)$	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



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