



SMA5V

TVS DIODE FOR ESD PROTECTION

SURFACE MOUNT SILICON ZENER DIODE

DESCRIPTION

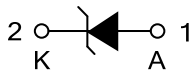
The UTC **SMA5V** is a single line TVS diode, for ESD protection.

The UTC **SMA5V** 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



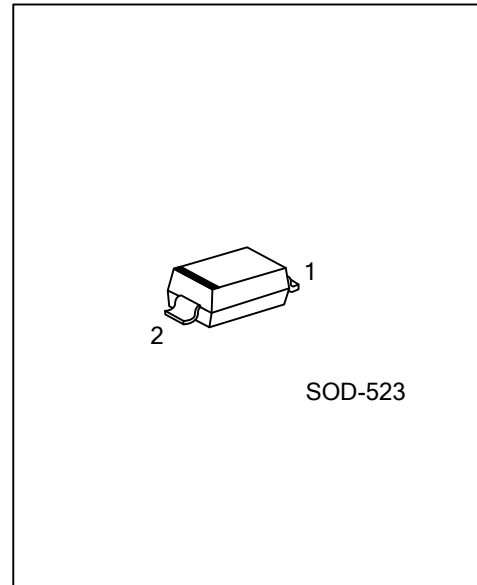
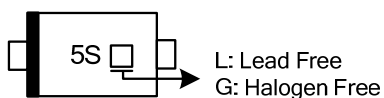
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SMA5VL-CC2-R	SMA5VG-CC2-R	SOD-523	A	K	Tape Reel

Note: Pin Assignment: A: Anode, K: Cathode

SMA5VL-CC2-R (1)Packing Type (2)Package Type (3)Halogen Free	(1) R: Tape Reel (2) CC2 : SOD-523 (3) G: Halogen Free, L: Lead Free
--	---

MARKING



■ ABSOLUTE MAXIMUM RATINGS

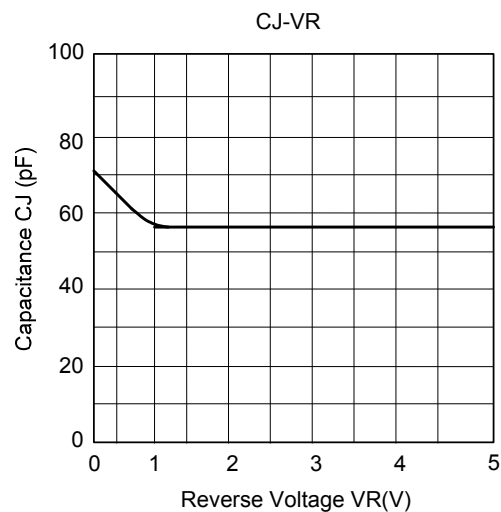
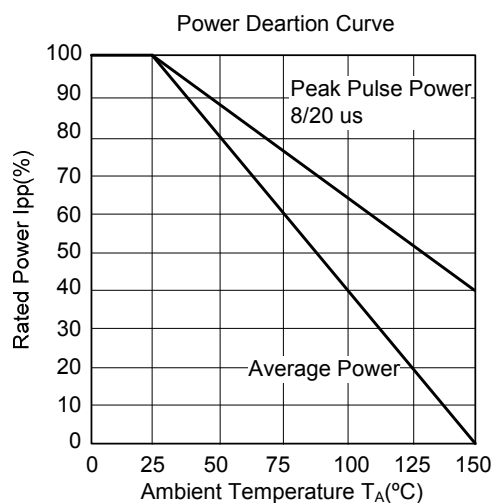
PARAMETER	SYMBOL	RATINGS	UNIT
Peak Pulse Power (tp=8/20μs)	P _{PK}	50	W
Peak Pulse Current (tp=8/20μs)	I _{PP}	5	A
Junction Temperature	T _J	-55~150	°C
Storage Temperature	T _{STG}	-55~150	°C

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	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	6			V
Reverse Leakage Current	I _R	V _{RWM} =5V			5	μA
Clamping Voltage	V _C	I _{PP} =5A, tp=8/20μs			14.5	V
Junction Capacitance	C _J	V _R =0V, f=1MHz			80	pF

■ 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. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.