

**SMA5V**

Preliminary

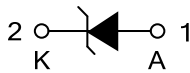
TVS DIODE FOR ESD PROTECTION**SURFACE MOUNT SILICON
ZENER DIODE****■ DESCRIPTION**

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

The UTC **SMA5V** is protection in portable electronics applications.

■ FEATURES

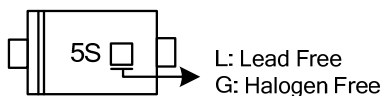
- * 50 Watts peak pulse power ($t_p=8/20\mu s$)
- * Transient protection for data lines to
 - ESD=8KV (Contact)
 - EFT=40A ($t_p=5/50ns$)
 - Lightning=5A ($t_p=8/20\mu s$)
- * Small package for use in portable electronics.
- * Suitable replacement for Multi-Layer Varistors in ESD protection applications.
- * 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
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■ 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

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