

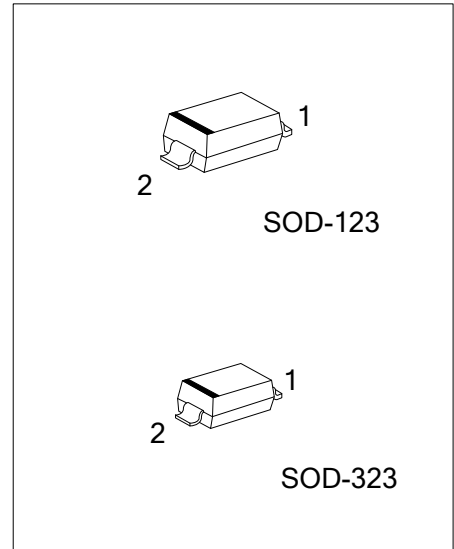


**USD03W THRU USD36W**

Preliminary

**TVS DIODE FOR ESD PROTECTION**

**SINGLE LINE TVS DIODE FOR ESD PROTECTION ELECTRONICS PRODUCTS**



■ **DESCRIPTION**

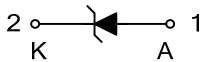
The UTC **USD03W THRU USD36W** is single line tvs diode, it uses UTC's advanced technology to provide customers with low leakage current, low operating and clamping voltage, etc.

The UTC **USD03W THRU USD36W** is suitable for ESD Protection.

■ **FEATURES**

- \* 320 Watts peak pules power( tp=8/20μs)
- \* Low clamping voltage and leakage current
- \* Use in portable electronics

■ **SYMBOL**



■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
USD03WL-CA2-R	USD03WG-CA2-R	SOD-123	A	K	Tape Reel
USD05WL-CA2-R	USD05WG-CA2-R	SOD-123	A	K	Tape Reel
USD08WL-CA2-R	USD08WG-CA2-R	SOD-123	A	K	Tape Reel
USD12WL-CA2-R	USD12WG-CA2-R	SOD-123	A	K	Tape Reel
USD15WL-CA2-R	USD15WG-CA2-R	SOD-123	A	K	Tape Reel
USD24WL-CA2-R	USD24WG-CA2-R	SOD-123	A	K	Tape Reel
USD36WL-CA2-R	USD36WG-CA2-R	SOD-123	A	K	Tape Reel
USD03WL-CB2-R	USD03WG-CB2-R	SOD-323	A	K	Tape Reel
USD05WL-CB2-R	USD05WG-CB2-R	SOD-323	A	K	Tape Reel
USD08WL-CB2-R	USD08WG-CB2-R	SOD-323	A	K	Tape Reel
USD12WL-CB2-R	USD12WG-CB2-R	SOD-323	A	K	Tape Reel
USD15WL-CB2-R	USD15WG-CB2-R	SOD-323	A	K	Tape Reel
USD24WL-CB2-R	USD24WG-CB2-R	SOD-323	A	K	Tape Reel
USD36WL-CB2-R	USD36WG-CB2-R	SOD-323	A	K	Tape Reel

Note: Pin Assignment: K: Cathode    A: Anode




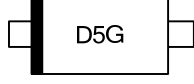

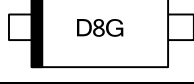
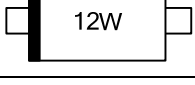
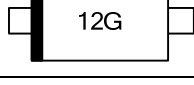
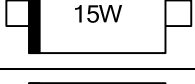
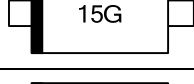
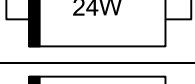
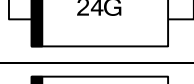
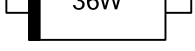
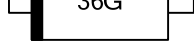
<p>USD03WG-CA2-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) CA2: SOD-123, CB2: SOD-323</li> <li>(3) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
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# USD03W THRU USD36W

Preliminary

TVSDIODE FOR ESD PROTECTION

## MARKING

Ordering Number	SOD-123	SOD-323
USD03W		
USD05W		
USD08W		
USD12W		
USD15W		
USD24W		
USD36W		

■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PK}$	320	W
ESD Voltage	$V_{ESD}$	25	kV
Operating Junction Temperature	$T_J$	-55 ~ +150	°C
Operating 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

PART NUMBER	Reverse Stand-Off Voltage	Reverse Breakdown Voltage		Reverse Leakage Current		Clamping Voltage ( $t_p=8/20\mu s$ )		Off State Junction Capacitance			
	$V_{RWM}$	$V_{BR} @ I_T$		$I_R @ V_R$		$V_C @ I_{PP}$		$C_J @ f$			
	Max.	Min.	$I_T$	Max.	$V_R$	Max.	$I_{PP}$	0Vdc Bias		5Vdc Bias	
	V	V	mA	$\mu A$	V	V	A	Typ.	f	Typ.	f
								pF	MHz	pF	MHz
USD03W	3.3	4.0	1	125	3.3	6.5	1	450	1	150	1
USD05W	5.0	6.0	1	10	5	9.8	1	300	1	100	1
USD08W	8.0	8.5	1	10	8	13.4	1	150	1	80	1
USD12W	12	13.3	1	1	12	19	1	130	1	50	1
USD15W	15	16.7	1	1	15	24	1	120	1	30	1
USD24W	24	26.7	1	1	24	43	1	80	1	10	1
USD36W	36	40	1	1	36	60	1	30	1	1	1

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