



BAV199W

DIODE

DUAL SURFACE MOUNT LOW LEAKAGE DIODE

DESCRIPTION

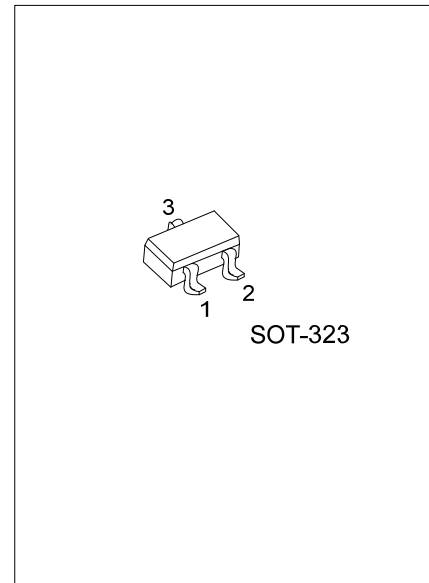
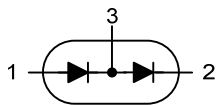
The UTC **BAV199W** is a dual surface mount diode providing the designers with extremely low leakage current.

The UTC **BAV199W** is suitable for automatic insertion.

FEATURES

* Extremely Low Leakage Current

SYMBOL



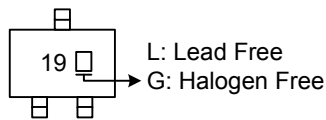
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BAV199WL-AL3-R	BAV199WG-AL3-R	SOT-323	A1	K2	K1A2	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>BAV199WG-AL3-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) AL3 : SOT-323 (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Working Peak Reverse Voltage	V_{RWM}	85	V
DC Blocking Voltage	V_R	85	V
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Forward Continuous Current	Single diode	160	mA
	Double diode	140	
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	@ $t = 1.0\mu\text{s}$	4.0	A
	@ $t = 1.0\text{ms}$	1.0	
	@ $t = 1.0\text{s}$	0.5	
Power Dissipation (Note 2)	P_D	250	mW
Junction Temperature	T_J	-65 ~ +150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^\circ\text{C}$

Notes: 1. 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.

2. Part mounted on FR-4 PC board with recommended pad layout.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 2)	θ_{JA}	500	$^\circ\text{C/W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note)	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	85			V
Forward Voltage (Note)	V_F	$I_F = 1.0\text{mA}$			0.90	V
		$I_F = 10\text{mA}$			1.0	
		$I_F = 50\text{mA}$			1.1	
		$I_F = 150\text{mA}$			1.25	
Leakage Current (Note)	I_R	$V_R = 75\text{V}$			5.0	nA
		$V_R = 75\text{V}, T_J = 150^\circ\text{C}$			80	
Total Capacitance	C_T	$V_R = 0, f = 1.0\text{MHz}$		2		pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$			3.0	μs

Note: Short duration test pulse to minimize self-heating effect.

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