

SURFACE MOUNT SWITCHING DIODES

BAV19W, BAV20W, BAV21W

**SOD-123
Formed SMD Package**



Marking: As indicated below with cathode band

Marking

BAV19W - WY
BAV20W - WZ
BAV21W - JX

Fast Switching Speed Diodes

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

DESCRIPTION	SYMBOL	BAV19W	BAV20W	BAV21W	UNIT		
Non Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V		
Repetitive Peak Reverse Voltage	V_{RRM}	100	150	200	V		
Working Peak Reverse Voltage	V_{RWM}	100	150	200	V		
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V		
DC Blocking Voltage	V_R	100	150	200	V		
Average Rectified Output Current	I_O	200			mA		
Forward Continuous Current	I_{FM}	400			mA		
Repetitive Peak Forward Surge Current	I_{FRM}	625			mA		
Non Repetitive Peak Forward Surge Current	I_{FSM}						
					at $t=1\text{ms}$	2.5	A
					at $t=1\text{s}$	0.5	A
Power Dissipation	P_D	250			mW		
Junction Temperature	T_j	- 65 to +150			$^\circ\text{C}$		
Storage Temperature Range	T_{stg}	- 65 to +150			$^\circ\text{C}$		

THERMAL RESISTANCE

Junction to Ambient in free air	$R_{th(j-a)}$	500	$^\circ\text{C/W}$
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ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	Min	Typ	Max	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	at $I_R=100\mu\text{A}$ BAV19W BAV20W BAV21W	120			V
			200			V
			250			V
Reverse Current	I_R	at Rated DC Blocking Voltage at $T_j=25^\circ\text{C}$ at $T_j=100^\circ\text{C}$			100	nA
					15	μA
Forward Voltage	V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$			1.0	V
					1.25	V

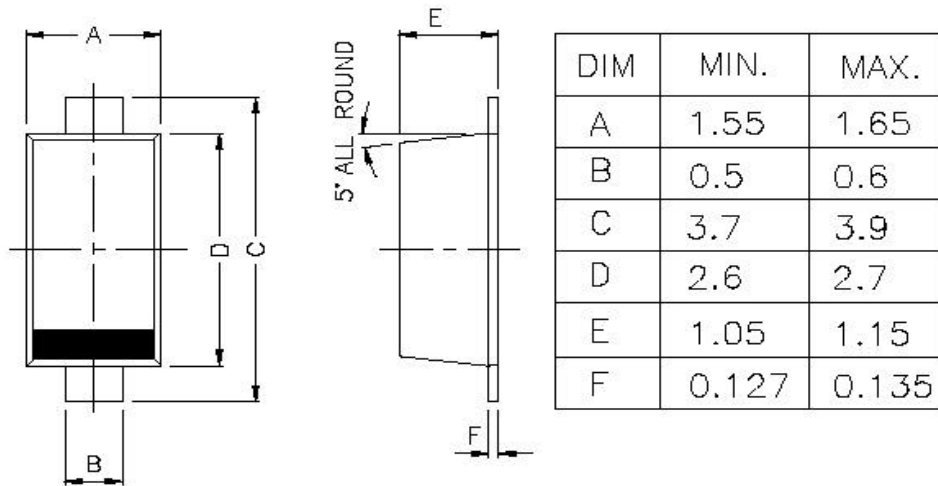
BAV19W_BAV21W Rev040805E

SURFACE MOUNT SWITCHING DIODES**BAV19W, BAV20W, BAV21W****SOD-123****Formed SMD Package****ELECTRICAL CHARACTERISTICS (T_a=25° C unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	Min	Typ	Max	UNIT
Total Capacitance	C _T	V _R =0V, f=1MHz			5	pF
Reverse Recovery Time	T _{rr}	at I _F = I _R =30mA, I _{RR} =0.1X I _R , R _L =100Ω			50	ns

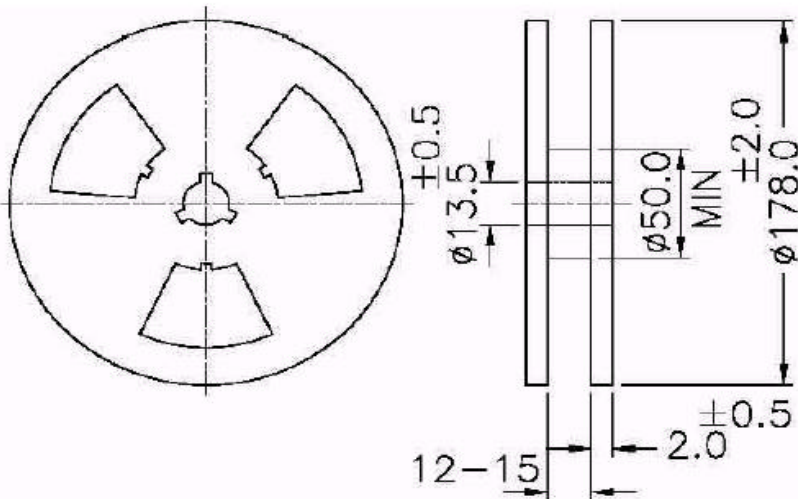
BAV19W_BAV21W Rev040805E

PACKAGE SOD-123 FL



All dimensions are in mm

CATHODE IS MARKED BY BAND



ALL DIMENSIONS ARE IN mm
 REEL ϕ 178 mm (7")
 3000 Pcs / REEL

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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