Continental Device India Limited
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

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=25ºC)

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=1ms		2.5			A
at t=1s		0.5			A
Power Dissipation	P_D	250			mW
Junction Temperature	T_j	- 65 to +150			ºC
Storage Temperature Range	T_{stg}	- 65 to +150			ºC

THERMAL RESISTANCE

Junction to Ambient in free air	$R_{th\ (j-a)}$	500	ºC/W

ELECTRICAL CHARACTERISTICS (T_a=25º C unless specified otherwise)

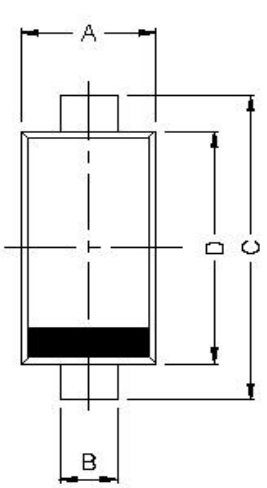
DESCRIPTION	SYMBOL	TEST CONDITION	Min	Typ	Max	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	at I_R=100µA				
		BAV19W	120			V
		BAV20W	200			V
		BAV21W	250			V
Reverse Current	I_R	at Rated DC Blocking Voltage				
		at T_j=25ºC			100	nA
		at T_j=100ºC			15	µA
Forward Voltage	V_F	I_F=100mA			1.0	V
		I_F=200mA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

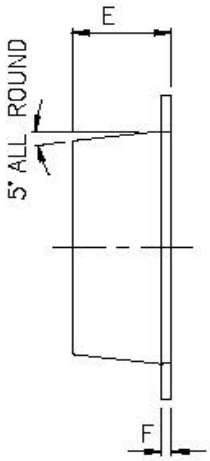
SOD-123
Formed SMD Package

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}=0.1XI_R, R_L=100Ω			50	ns

PACKAGE SOD–123 FL

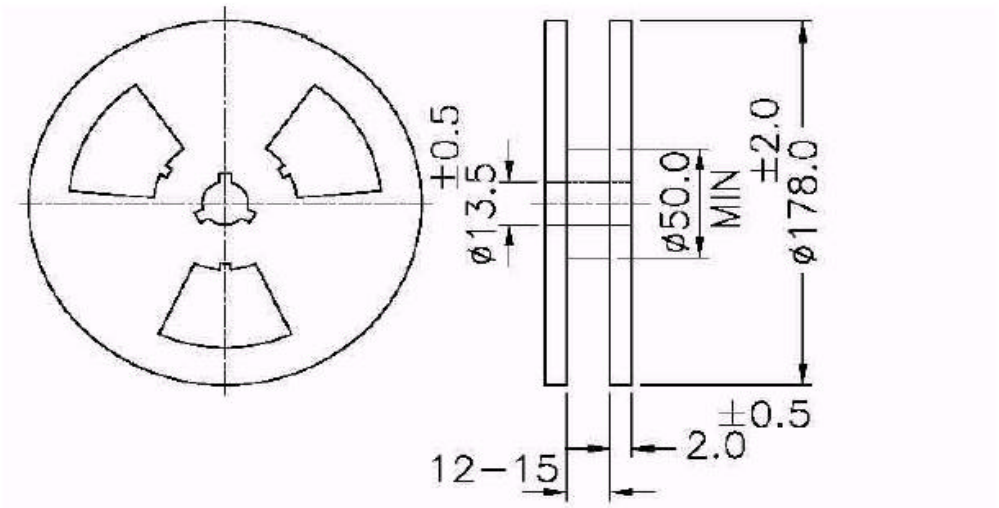




DIM	MIN.	MAX.
A	1.55	1.65
B	0.5	0.6
C	3.7	3.9
D	2.6	2.7
E	1.05	1.15
F	0.127	0.135

All dimensions are in mm

CATHODE IS MARKED BY BAND



ALL DIMENSIONS ARE IN mm
REEL ø 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

CDIL is a registered Trademark of
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BAV19W_BAV21W Rev040805E