

■ Switching Diodes

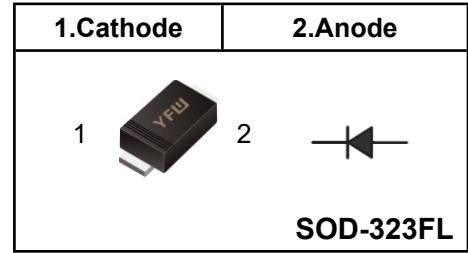
FEATURES

- ◆ For surface mounted applications
- ◆ Glass Passivated Chip Junction
- ◆ Fast reverse recovery time
- ◆ Ideal for automated placement
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆ Case: SOD-323FL
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 4.5mg / 0.00016oz

Pinning



Marking Code

BAV19WSFL	A8
BAV20WSFL	T2
BAV21WSFL	T3

Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV19WSFL	BAV20WSFL	BAV21WSFL	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	V
Maximum RMS voltage	V_{RMS}	100	150	200	V
Continuous Forward Current	I_F	250			mA
Repetitive Peak Forward Current	I_{FRM}	625			mA
Non-reptitive Peak Forward Surge Current	I_{FSM}	at 1s			A
		at 1ms			
		at 1us			
Total Power Dissipation	P_{tot}	500			mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150			°C

Characteristics at Ta = 25 °C

Parameter	Symbols	BAV19WSFL	BAV20WSFL	BAV21WSFL	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	120	200	250	V
Maximum Forward Voltage	V_F	at 100 mA			V
		at 200 mA			
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ C$			uA
		$T_a=150^\circ C$			
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	5			pF
Maximum Reverse Recovery Time	T_{rr}	50			nS

Fig.1 Power Derating Curve

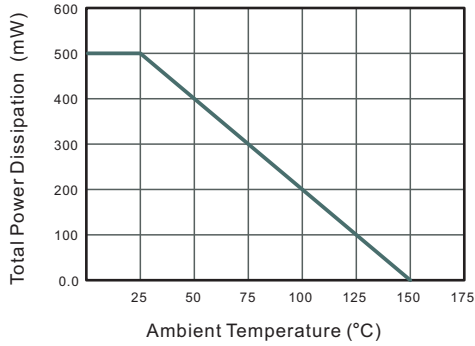


Fig.2 Typical Reverse Characteristics

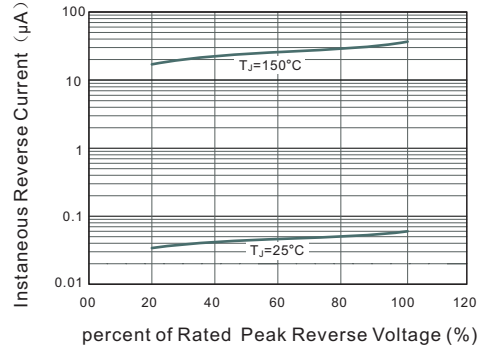


Fig.3 Typical Instantaneous Forward Characteristics

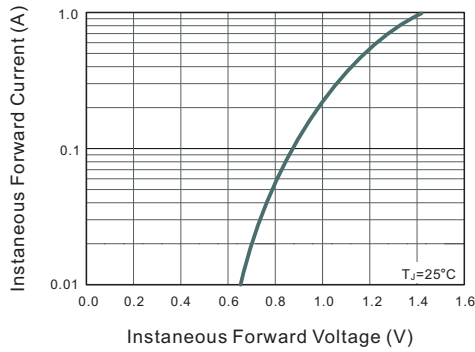
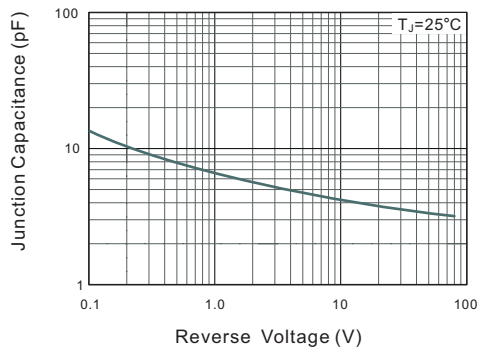
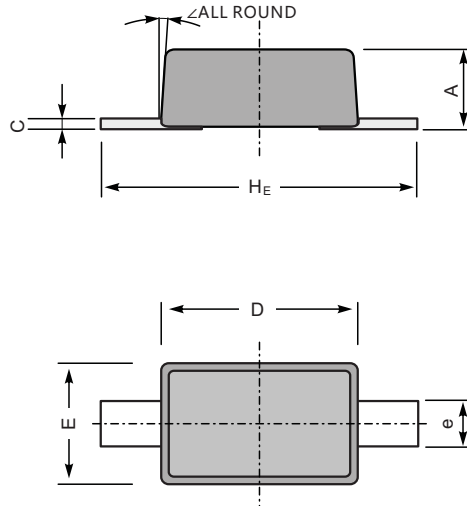


Fig.4 Typical Junction Capacitance



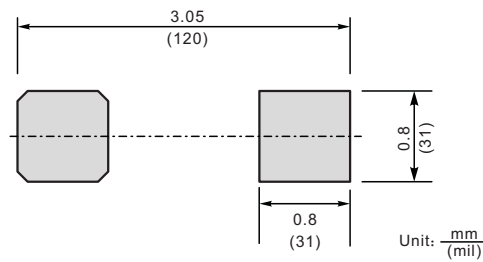
Package Outline SOD-323FL

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	H _E	\angle
mm	max	1.0	0.25	1.8	1.35	0.4	2.7	8°
	min	0.8	0.05	1.6	1.15	0.25	2.3	
mil	max	39	9.8	71	53	18	106	
	min	31	2.0	63	45	10	91	

The recommended mounting pad size



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323FL	Tape/Reel, 7" reel	3000	EIA-481-1