

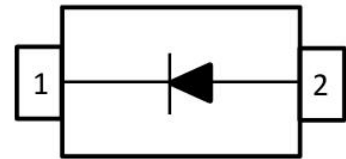
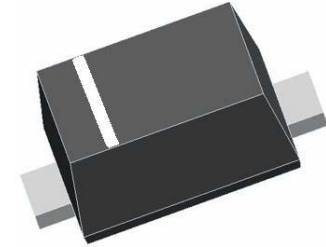


General Characteristics

VR	IO	VF(Max)	IFSM	TjMax
75V	150mA	1.2V@IF=200mA	2A	150°C

Features

- SOD323FL Package
- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 3
- High temperature soldering guaranteed 260°C/10seconds at terminals



Applications

- Extreme fast switches
- Automotive



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAS16WF	SOD-323FL	T4	3000

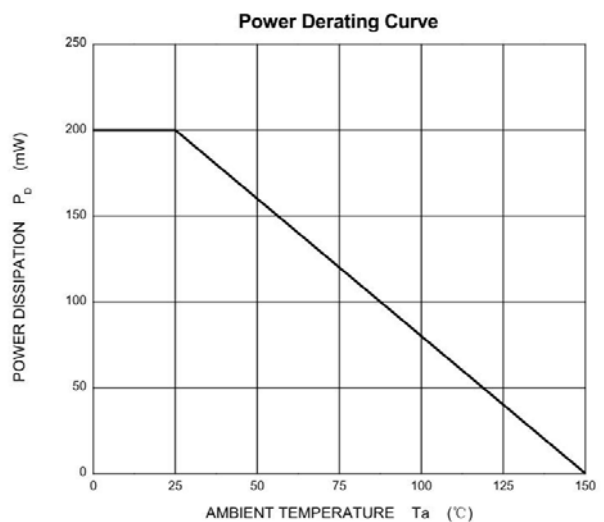
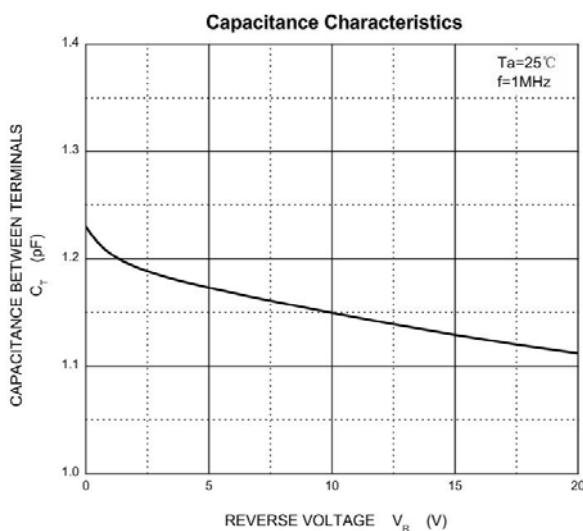
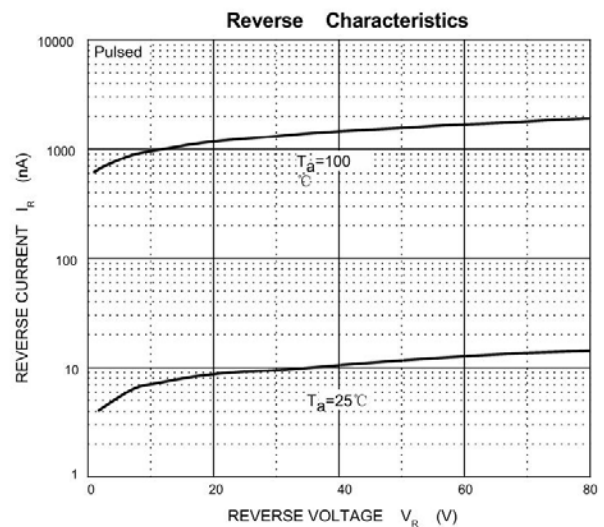
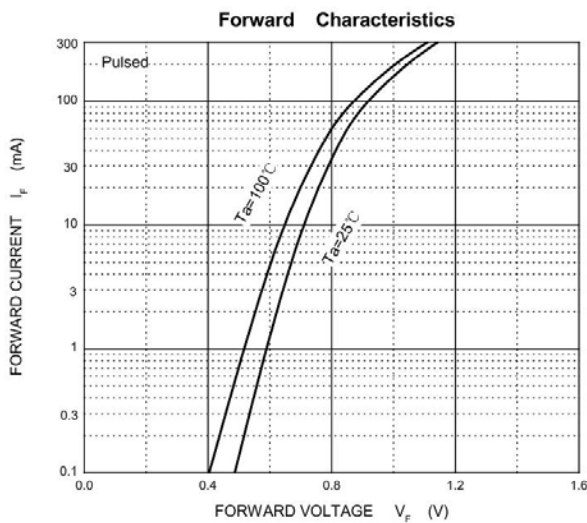
Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	VRM	100	V
Peak Repetitive Peak Reverse Voltage	VRRM	75	V
Working Peak Reverse Voltage	VRWM	75	V
DC Blocking Voltage	VR	75	V
RMS Reverse Voltage	VR(RMS)	53	V
Forward Continuous Current	IFM	300	mA
Average Rectified Output Current	IO	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	2.0	A
Power dissipation	PD	200	mW
Thermal Resistance Junction to Ambient Air	RθJA	625	°C/W
Operation Junction and Storage Temperature Range	Tj, Tstg	-55~150	°C

Electrical Characteristics (Ta=25°C, unless otherwise noted)

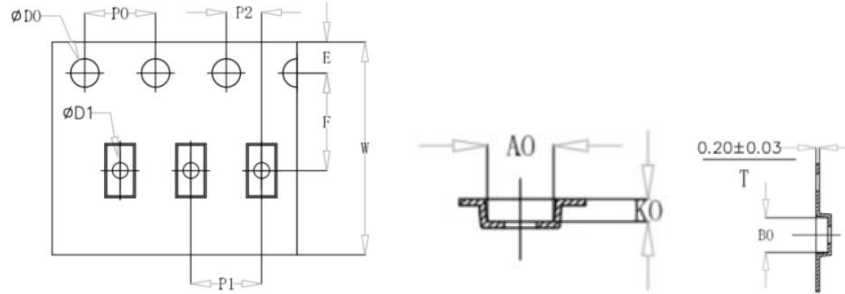
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Type	Max	
Breakdown Voltage	VR	IR=100uA	100			V
		IR=5uA	75			
Reverse Leakage Current	IR	VR=20V			25	nA
		VR=75V			1	uA
Forward Voltage	VF	IF=1mA			0.715	V
		IF=10mA			0.855	
		IF=100mA			1.0	
		IF=200mA			1.2	
Reverse Recovery Time	TRR	IF= IR=10mA; RL=100Ω; IRR=0.1 X IR			4	nS
Capacitance	CT	VR=0V, f=1MHZ			2	pF

Typical Characteristics



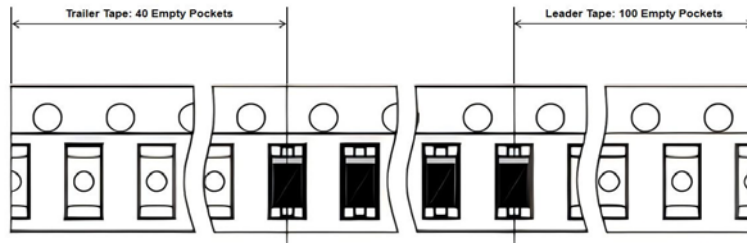
Package Information

Carrier Dimension(mm)

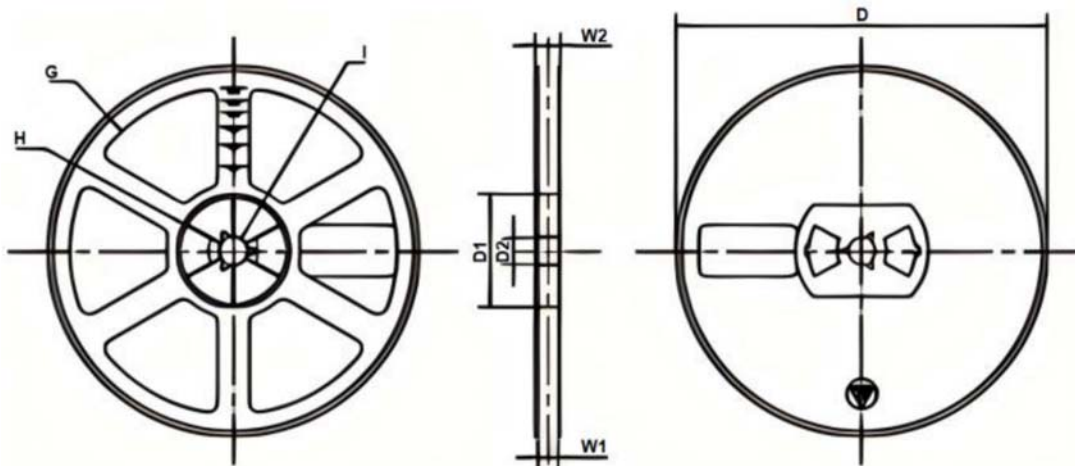


Dimensions are in millimeter

Pkg Type	W	E	F	D0	D1	P0	P2	10P0	P1	A0	B0	K0	T
SOD-323FL	8.00	1.75	3.5	Ø1.55	1.00	4.00	2.00	40.00	4.00	1.42	2.90	1.00	0.20
(Tolerance)	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10	±0.20	±0.10	±0.10	±0.10	±0.10	±0.03



Reel Dimension(mm)



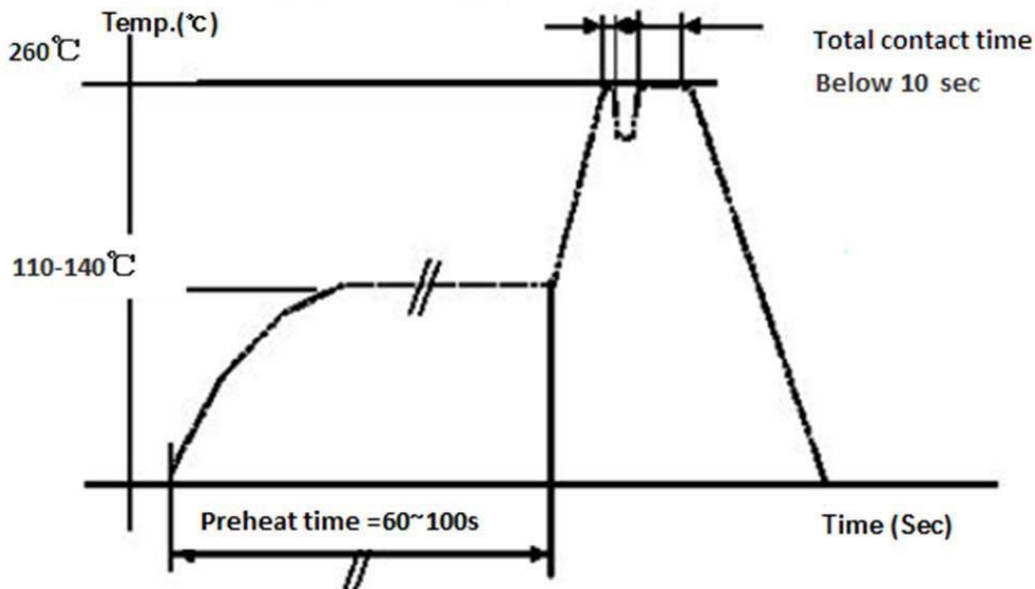
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Φ178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	±2	±1	±1	±1	±1	±1	±1	±1

Package Specifications

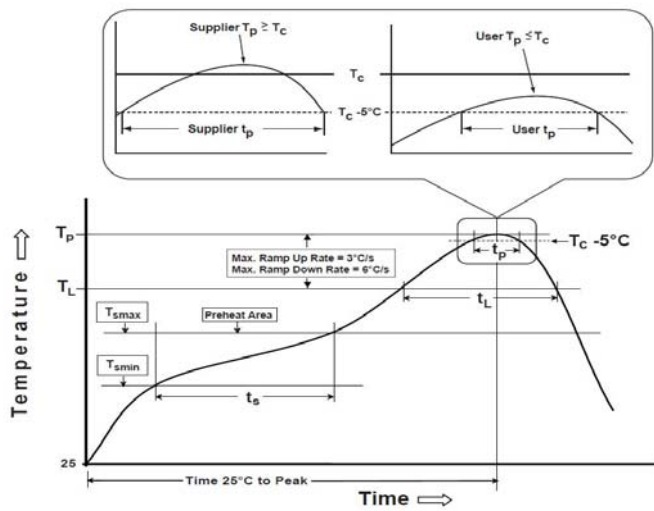
Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
SOD323FL	7'	178	3	210*208*203	45	440*400*230	180

Recommended Soldering Profile for Rectifier Diodes (Pb Free)

a) Wave Soldering Profile



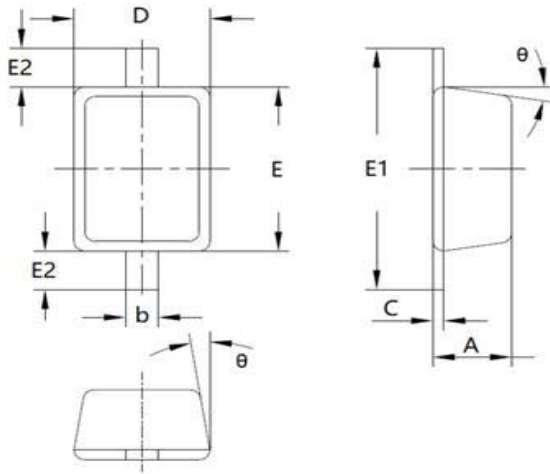
b) Reflow Soldering Profile (Pb Free Application), refer to IPC/JEDEC J-STD-020



Preheat/Soak Temperature Min (T _{smin}) Temperature Max (T _{smax}) Time (ts) from (T _{smin} to T _{smax})	50 °C 200 °C 60-120 seconds
Melting Point of Solder (Sn Ag Cu)	217°C
Ramp-up Rate to 217°C(Melting Point of Solder)	3°C/sec
Time at Temp.>217°C (Melting Point of Solder)	60~150 Sec
Peak Temperature	255±5°C
Time within 5°Cbelow Peak Temp.	20~40 Sec
Cooling Rate	6°C/sec (max)
Time from 25°C to Peak Temp.	8min (max)

c) Manual Soldering

When using an electric soldering iron for manual soldering, it is recommended that the temperature does not exceed 300°C and the soldering time is less than 10 seconds.

Package Mechanical Data


Symbol	Dimensions In Millimeters	
	Min	Max
A	0.675	0.850
b	0.250	0.400
c	0.090	0.150
D	1.150	1.350
E	1.600	1.800
E1	2.250	2.750
E2	0.400 REF	
θ	9° REF	

Suggested Pad Layout
