

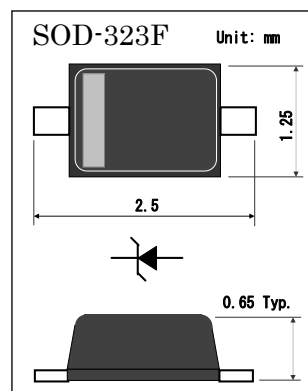
SOD-323F Plastic-Encapsulate Diodes

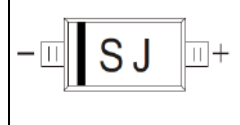
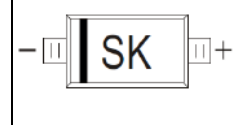
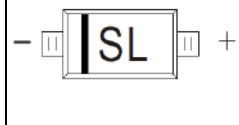
SCHOTTKY BARRIER DIODE

Features:

For use in low voltage, high frequency inverters
 Free wheeling, and polarity protection applications

MARKING: The marking bar indicates the cathode



B5817WS	B5818WS	B5819WS
		

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

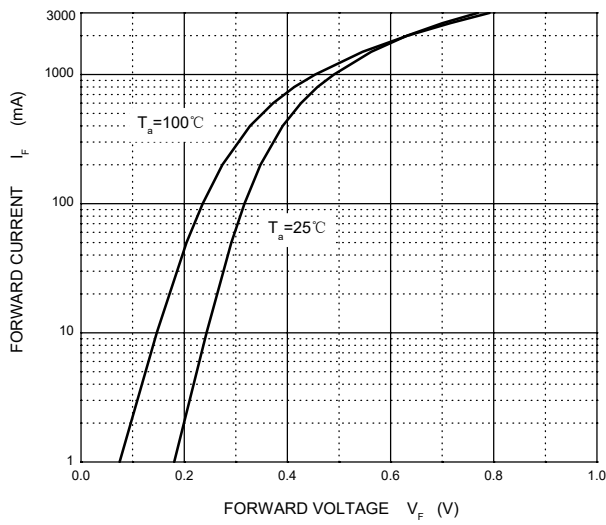
Parameter	Symbol	B5817WS	B5818WS	B5819WS	Unit
Non-repetitive peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Working peak reverse voltage	V_{RWM}				
DC blocking voltage	V_R				
RMS reverse voltage	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	I_O	1			A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Repetitive peak forward current	I_{FRM}	1.5			A
Power dissipation	P_d	250			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400			°C/W
Operation Junction temperature Range	T_J	-40 ~ +150			°C
Storage Temperature Range	T_{STG}	-55 ~ +150			°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

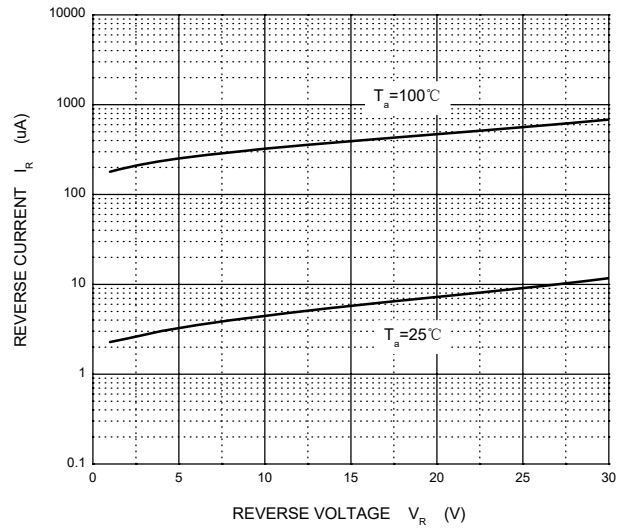
Parameter	Symbol	Test conditions	Min	Max	Unit		
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1mA$ B5817WS B5818WS B5819WS	20 30 40		V		
Reverse voltage leakage current	I_R	$V_R = 20V$ $V_R = 30V$ $V_R = 40V$ B5817WS B5818WS B5819WS		1	mA		
Forward voltage	V_F	B5817WS	$I_F = 1A$ $I_F = 3A$	0.45 0.75	V		
		B5818WS	$I_F = 1A$ $I_F = 3A$	0.55 0.875	V		
			B5819WS	$I_F = 1A$ $I_F = 3A$	0.6 0.9	V	
		Diode capacitance		C_D	$V_R = 4V, f = 1MHz$		120

Typical Characteristics

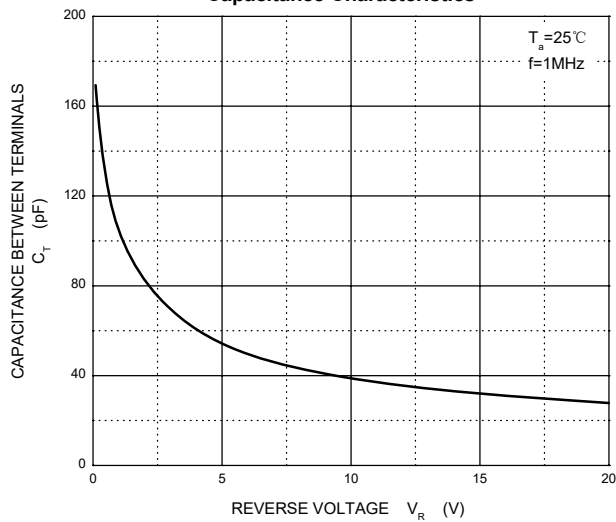
Forward Characteristics



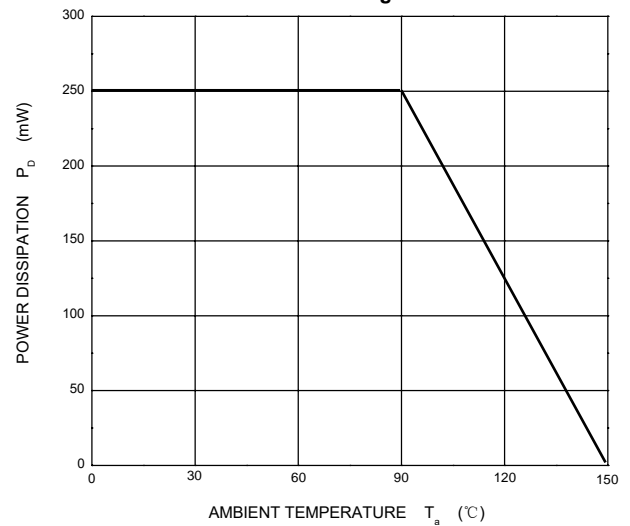
Reverse Characteristics



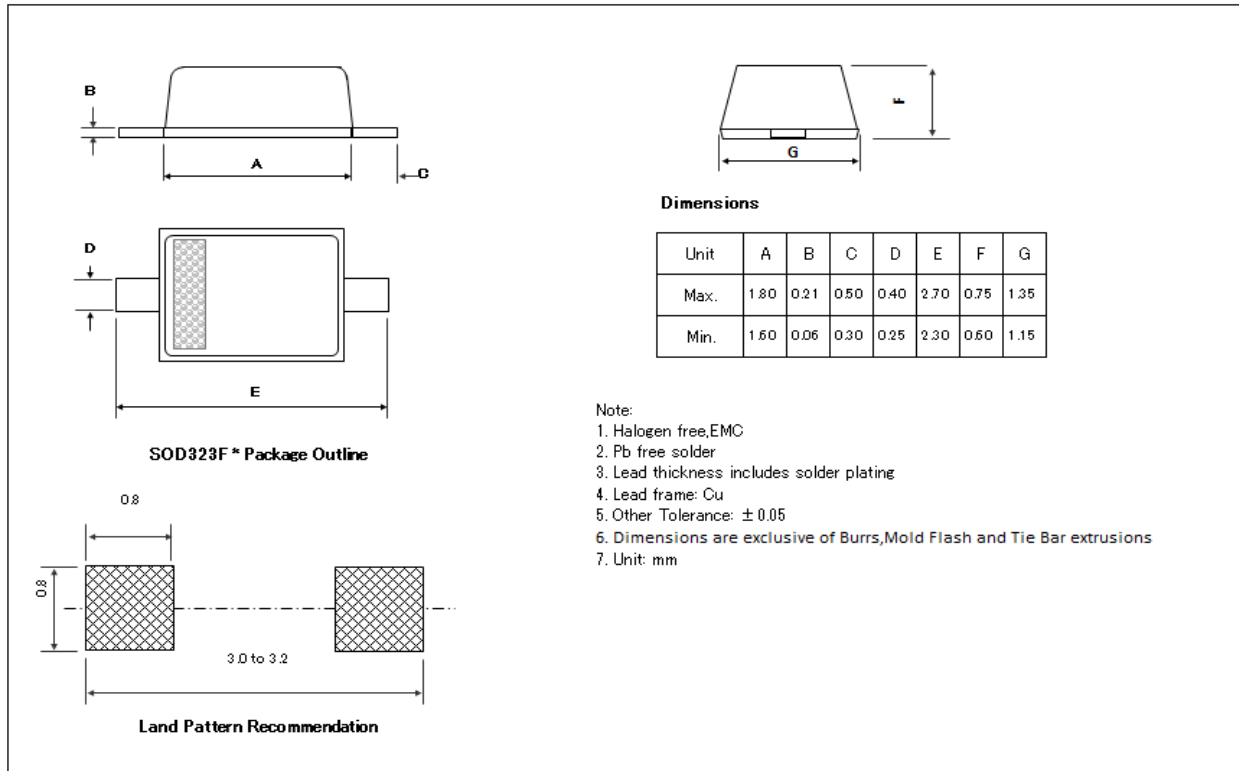
Capacitance Characteristics



Power Derating Curve

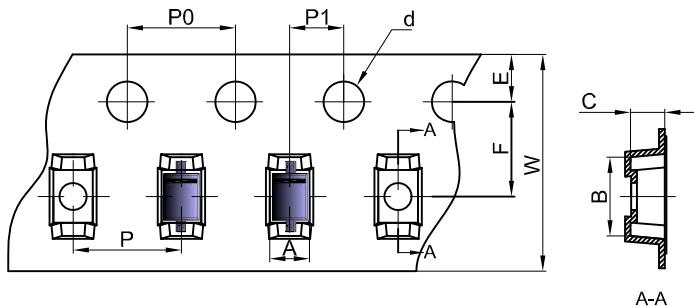


PACKAGE OUTLINE AND PAD LAYOUT INFORMATION



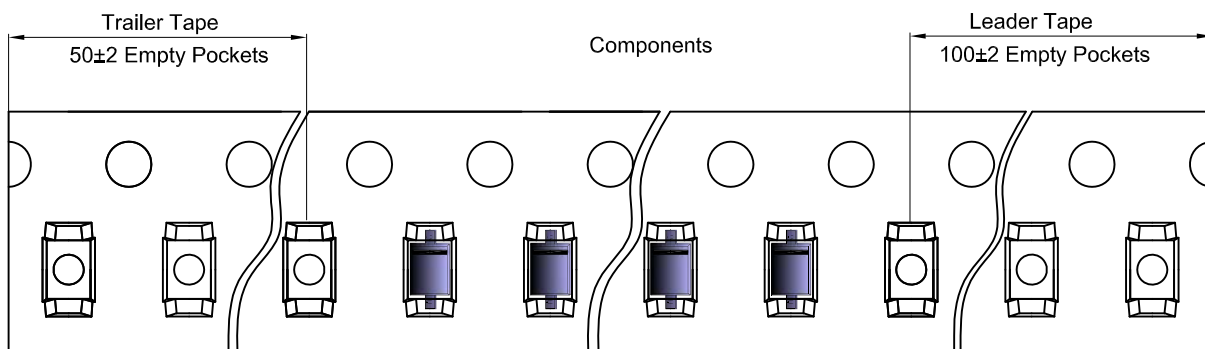
SOD-323F Tape and Reel

Embossed Carrier Tape

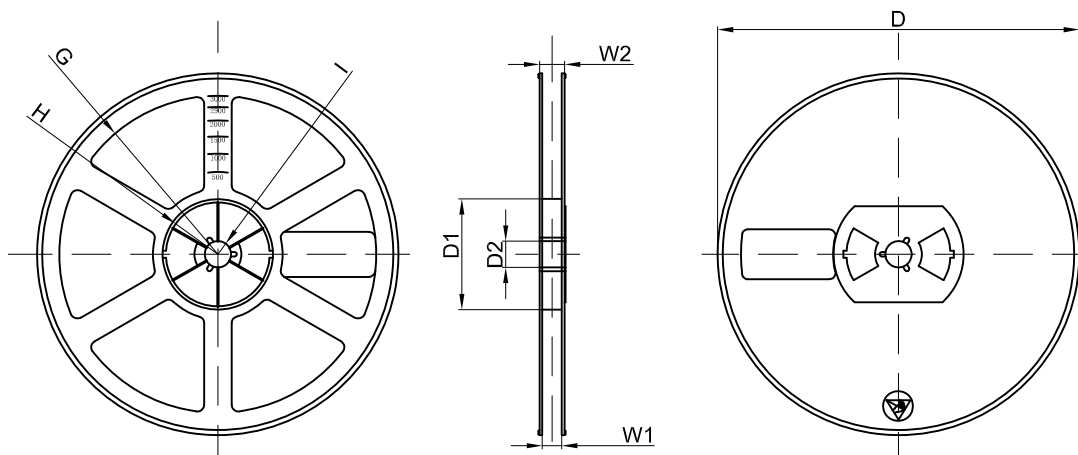


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	0.85	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

Tape Leader and Trailer



Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	