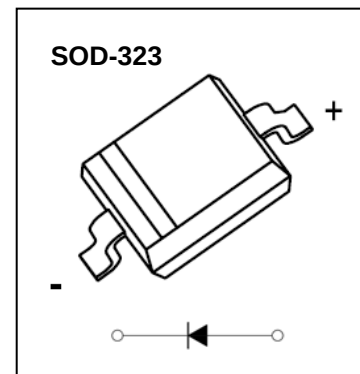


**1 A Surface Mount Schottky Barrier Diode****FEATURES**

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

MARKING: B5817WS: SJ
B5818WS: SK
B5819WS: SL

**Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)**

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	20 30 40	V
Average Forward Rectified Current	$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current ($t = 8.3\text{ ms}$)	I_{FSM}	9	A
Power Dissipation	P_{tot}	450	mW
Operating Temperature Range	T_j	- 55 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	20 30 40	- - -	V
Forward Voltage at $I_F = 1\text{ A}$	V_F	- - -	0.45 0.55 0.6	V
at $I_F = 3\text{ A}$	V_F	- - -	0.75 0.875 0.9	V
Reverse Voltage Leakage Current at $V_R = 20\text{ V}$ at $V_R = 30\text{ V}$ at $V_R = 40\text{ V}$	I_R	- - -	1 1 1	mA
Total Capacitance at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	120	pF

Fig. 1 - Forward Current Derating Curve

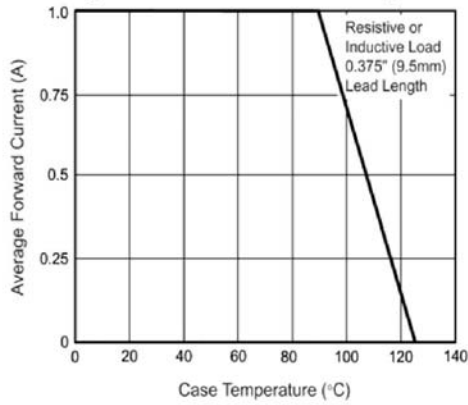


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

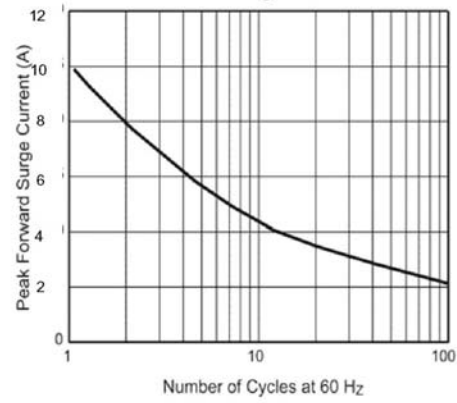


Fig. 3 - Typical Instantaneous Forward Characteristics

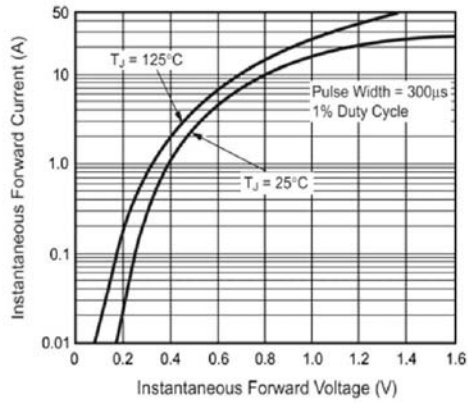


Fig. 4 - Typical Reverse Characteristics

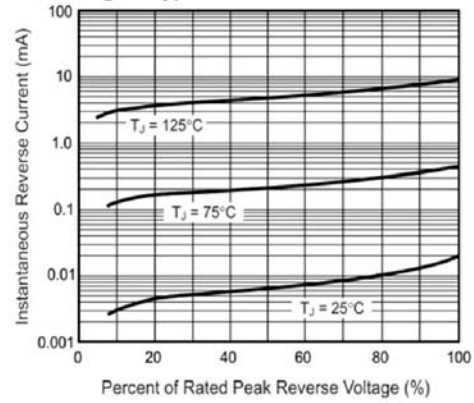


Fig. 5 - Typical Junction Capacitance

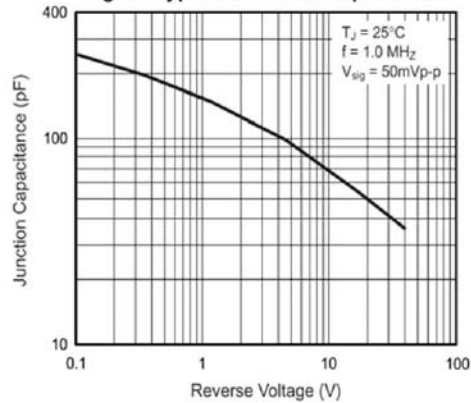
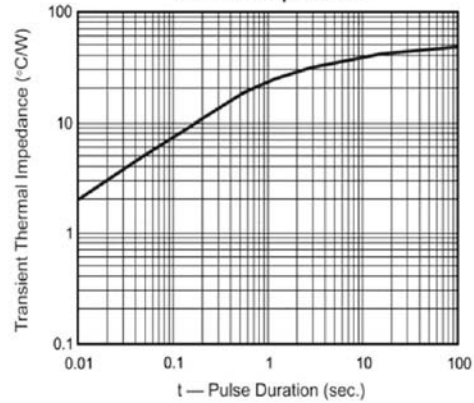
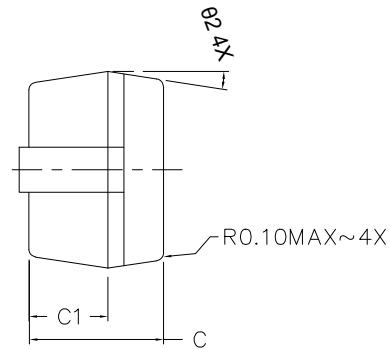
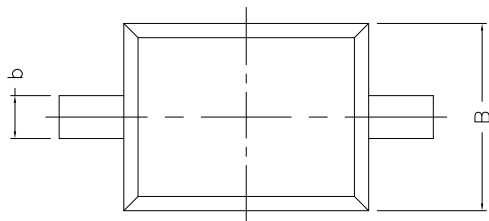
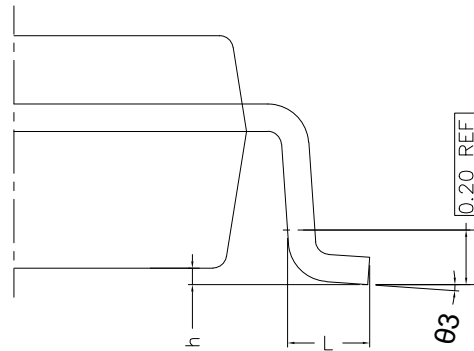
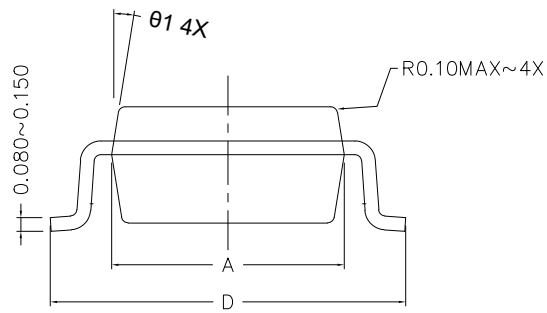


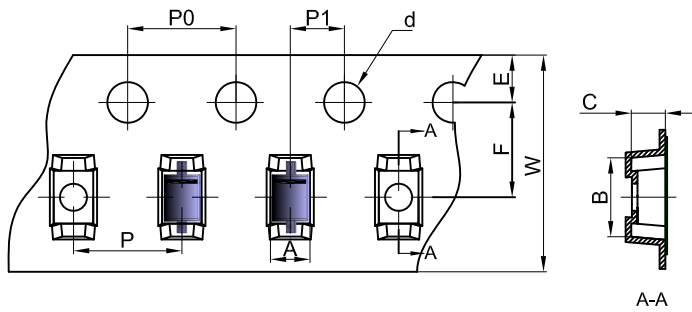
Fig. 6 - Typical Transient Thermal Impedance



**SOD-323 Package Outline Dimensions (Units: mm)**

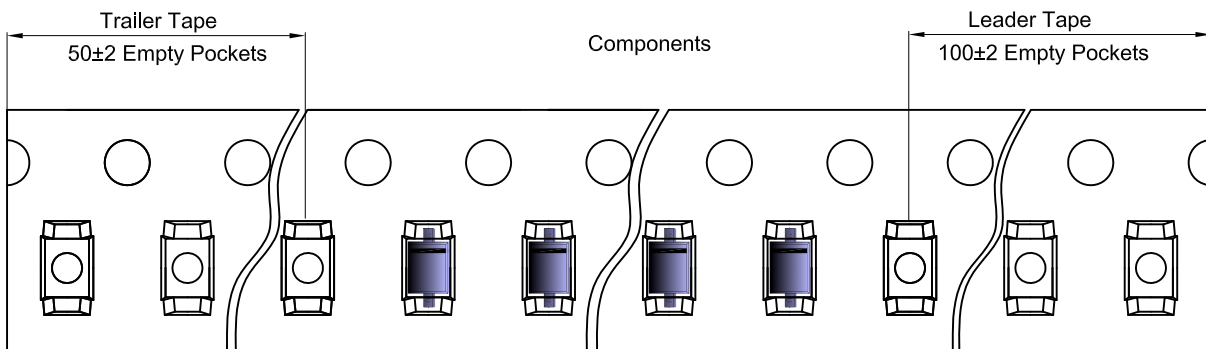
COMMON DIMENSIONS (UNITS OF MEASURE IS mm)			
	MIN	NORMAL	MAX
A	1.600	1.700	1.800
B	1.200	1.300	1.400
C	0.750	0.850	0.950
C1	0.450	0.500	0.550
D	2.450	2.600	2.750
L	0.200	0.300	0.400
b	0.200	0.300	0.400
h	0.010	0.050	0.100
θ1	9° TYPE		
θ2	9° TYPE		
θ3	0° ~ 8°		

SOD-323 Embossed Carrier Tape

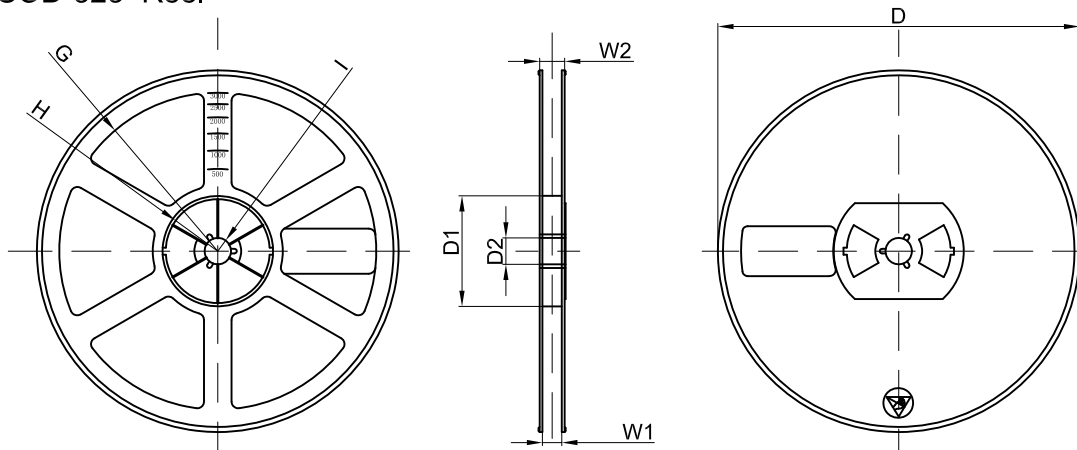


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



SOD-323 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	192x182x182	180,000 pcs	400x385x205	