SOD-523 Plastic-Encapulate Diodes

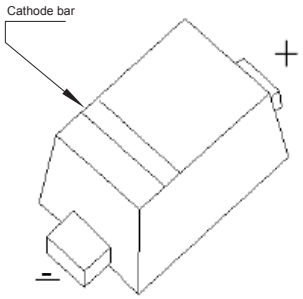
B5819WT SCHOTTKY BARRIER DIODES

FEATURES

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

SOD-523

RoHS COMPLIANT



Marking



Mechanical Data

Case : SOD-523

Terminals : Solderable per MIL-STD-750,Method 2026



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

Parameter	Symbo	B5819WT	Unit
Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Rectified Output Current	I_O	1	A
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	5	A
Power Dissipation	Pd	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	400	℃/W
Storage Temperature	T_j ,T_{stg}	-50~+125	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			0.60	V	I_F=1A
Reverse current	I_R			1.0 10	mA	Tj = 25°C Tj = 100°C
Capacitance between terminals	C_j			120	pF	V_R=4V, f=1MHZ

The above data are for reference only.

Typical Characterisitics

Fig.1 Power Derating Curve

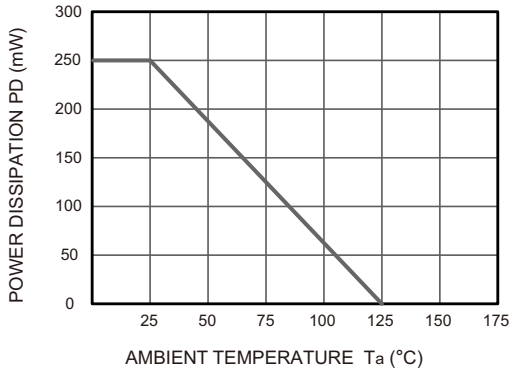


Fig.2 Typical Reverse Characteristics

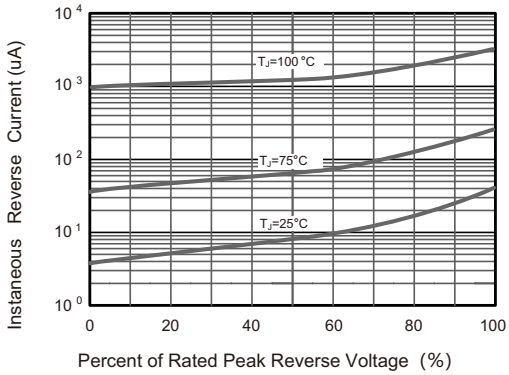


Fig.3 TYPICAL FORWARD VOLTAGE

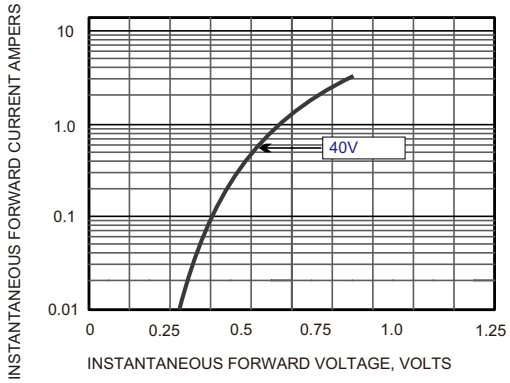
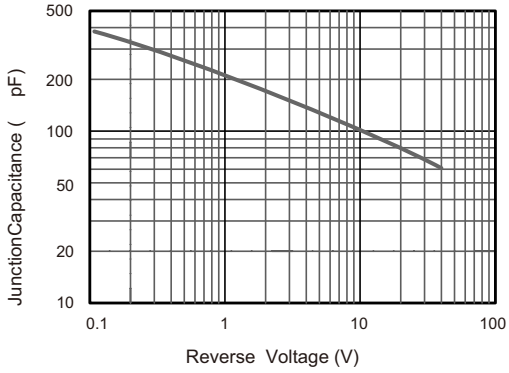


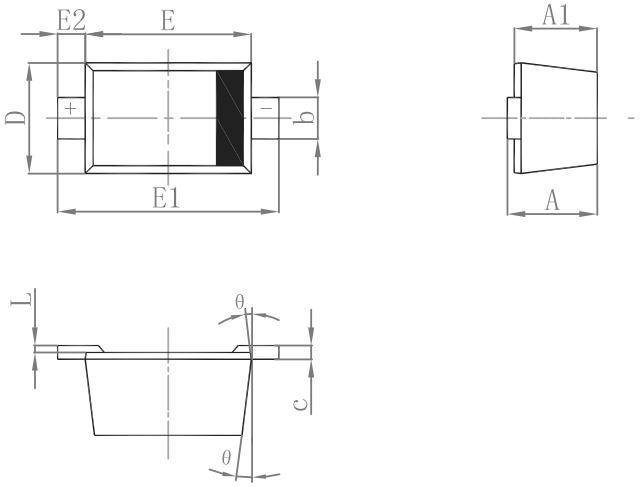
Fig.4 Typical Junction Capacitance



The curve above is for reference only.

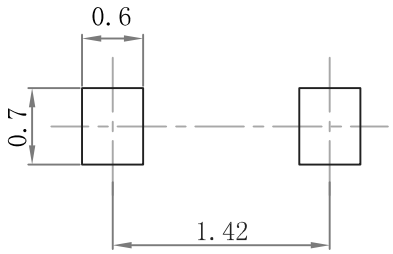
Outlitne Drawing

SOD-523 Package Outline Dimensions



Sym ol	imensions In Millimeters		imensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.770	0.020	0.031
b	0.250	0.400	0.010	0.016
c	0.080	0.150	0.003	0.006
D	0.750	1.000	0.030	0.040
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.150	0.250	0.006	0.010
L	0.000	0.070	0.000	0.003
K	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in/millimeters.
2.General tolerance: ±0.05mm.
3.The pad layout is for reference purposes only.

PACKAGE SPECIFICATIONS

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
SOD-523	7'	178	3000	190×190×190	45,000	400×400×220	180,000

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