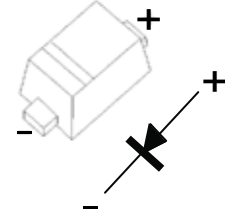


SCHOTTKY BARRIER DIODE

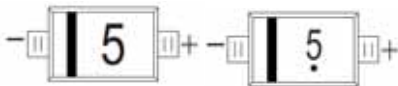
FEATURES

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability
- P/N suffix V means AEC-Q101qualified, e.g:RB751S-40V
- P/N suffix V means Halogen-free

SOD-523



MARKING: 5



The marking bar indicates the cathode
Solid dot = Green molding compound device, if none,
the normal device.

Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
V_{RRM}	Repetitive Peak Reverse Voltage	40	V
V_R	DC Blocking Voltage	30	V
I_O	Continuous Forward Current	30	mA
I_{FSM}	Non-Repetitive Peak Forward Current *1	0.2	A
P_D	Power Dissipation	200	mW
T_J	Junction Temperature	125	°C
T_{STG}	Storage Temperature	-55 to +125	°C

*1 8.3 ms single half sine-wave

Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_F	Forward Voltage	$I_F = 1\text{mA}$			0.37	V
I_R	Reverse Current	$V_R = 30\text{V}$			0.5	μA
C	Capacitance	$V_R = 1\text{V}, f = 1\text{MHz}$		2		pF

RATING AND CHARACTERISTICS CURVES (RB751S-40V)

Fig. 1 - Forward Characteristics

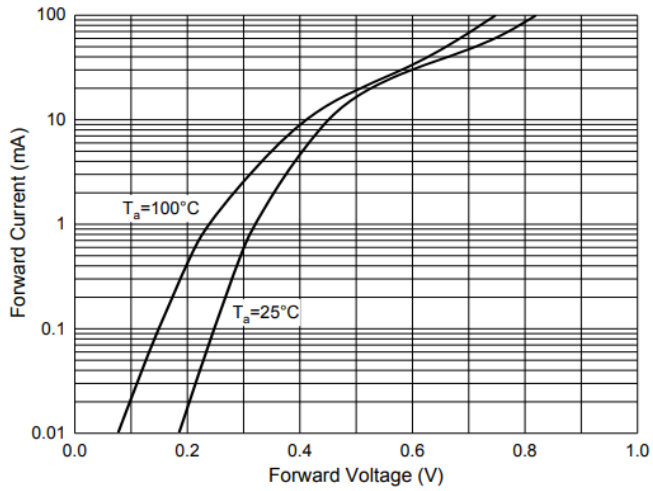


Fig. 2 - Reverse Characteristics

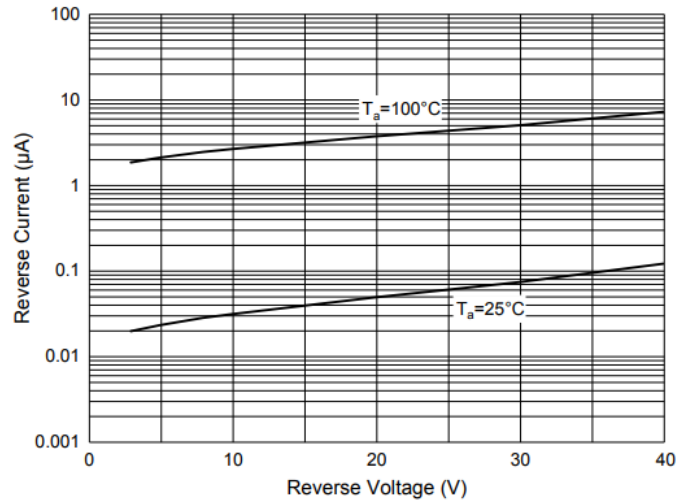


Fig. 3 - Capacitance Characteristics

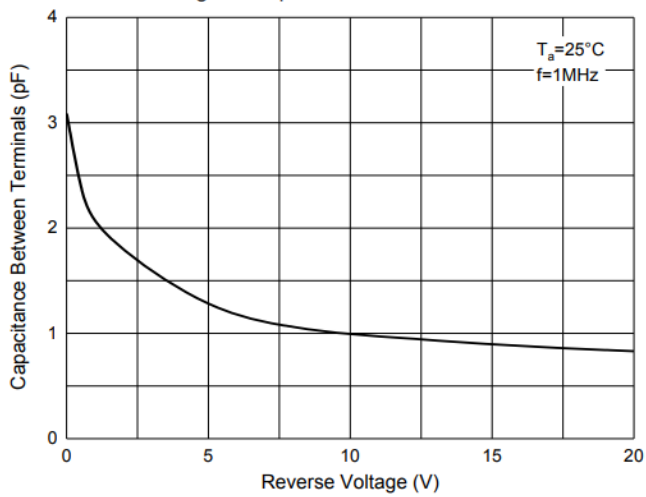
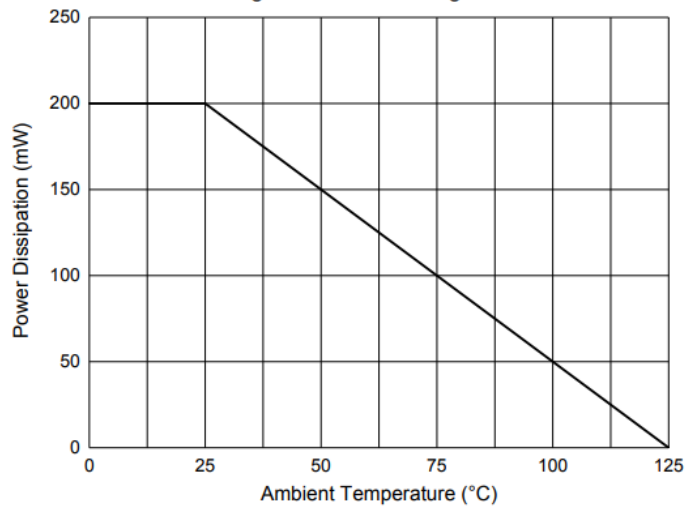
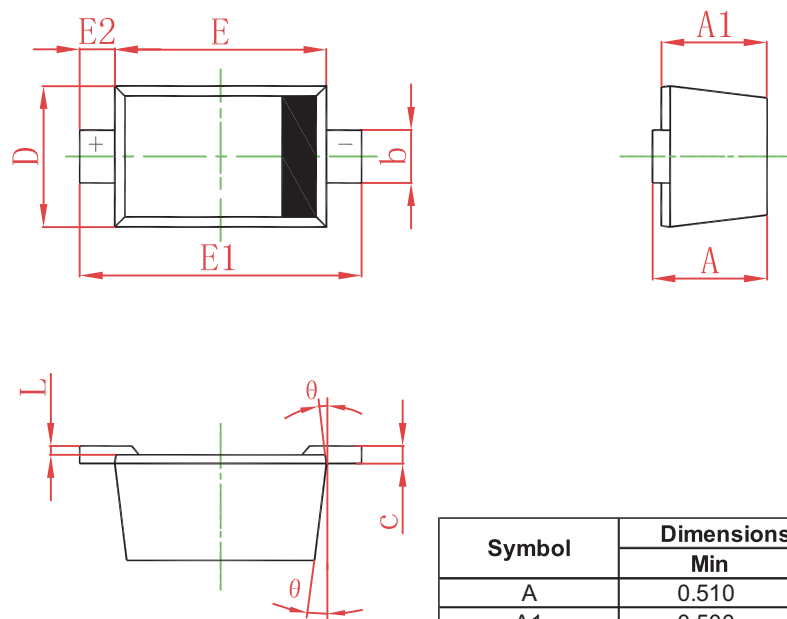


Fig. 4 - Power Derating Curve

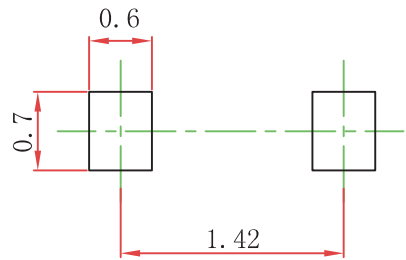


SOD-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

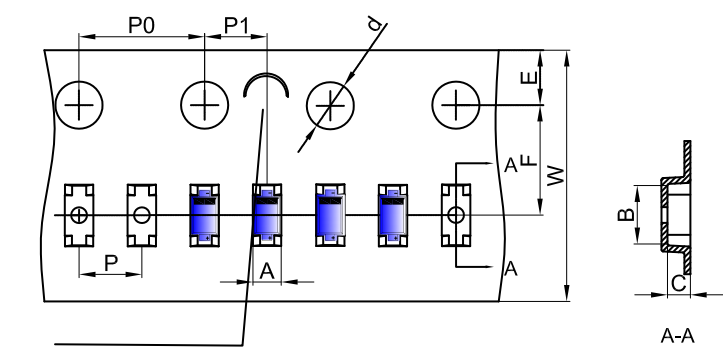
SOD-523 Suggested Pad Layout



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

SOD-523 Tape and Reel

SOD-523 Embossed Carrier Tape

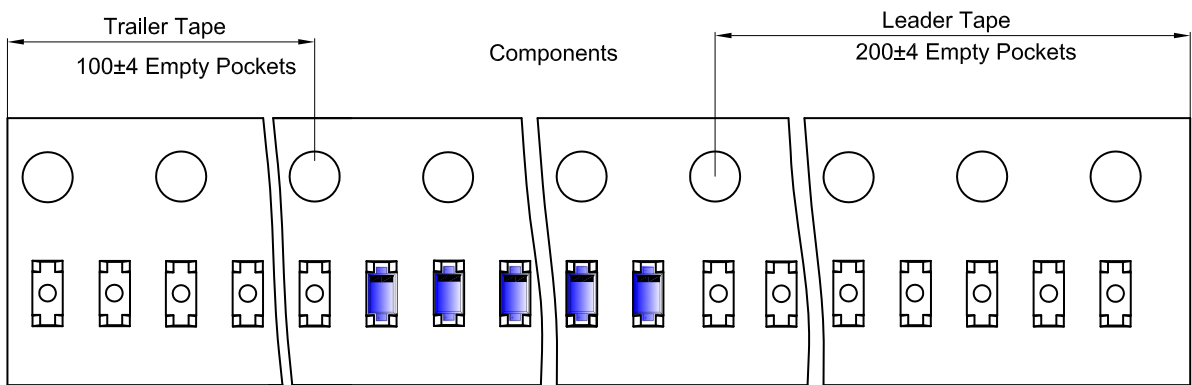


Packaging Description:

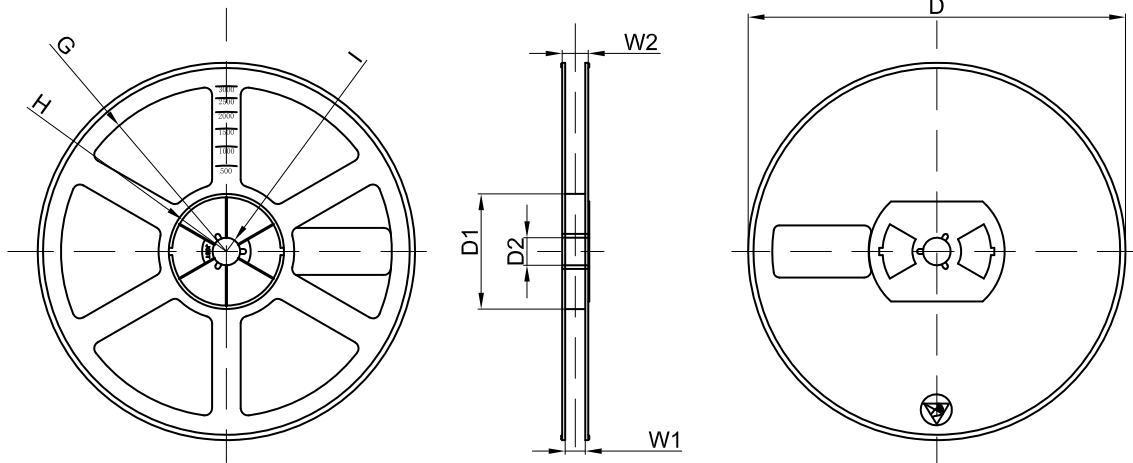
SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter											
Pkg type	A	B	C	d	E	F	P0	P	P1	W	
SOD-523	0.9	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00	

SOD-523 Tape Leader and Trailer



SOD-523 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)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	

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