



RB500V-40WSGH

SCHOTTKY DIODES

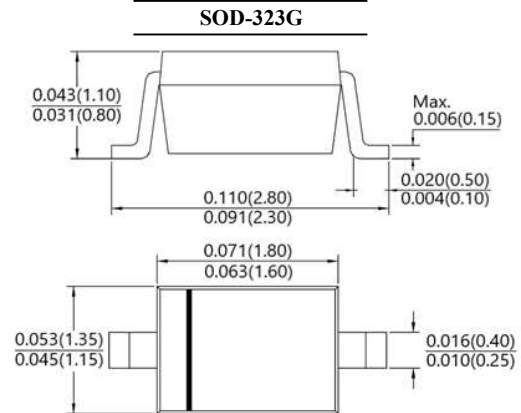
FEATURES

- Low Reverse Current
- High Reliability
- Suffix "H" indicates Halogen-free parts, ex. RB500V-40WSGH

MECHANICAL DATA

Case : SOD-323G

Polarity : Indicated by cathode band



Dimensions in inch and (millimeters)

Maximum Ratings@ $T_A = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	45	V
Reverse Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Surge Current (60Hz for 1Cycle)	I_{FSM}	1	A
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	T_{STG}	-40 to +125	$^\circ\text{C}$

Note :

1. Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Electrical Characteristics@ $T_A = 25\text{ }^\circ\text{C}$

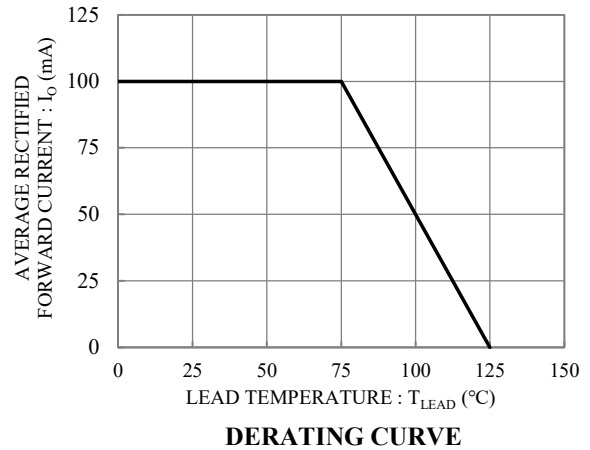
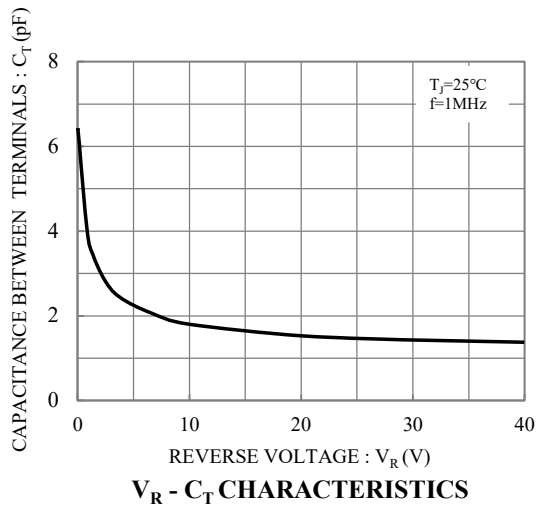
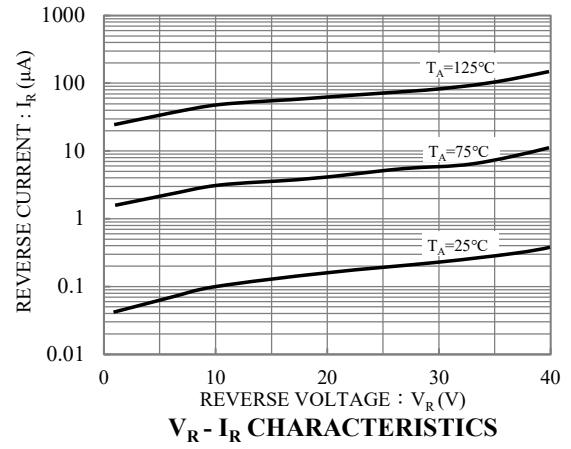
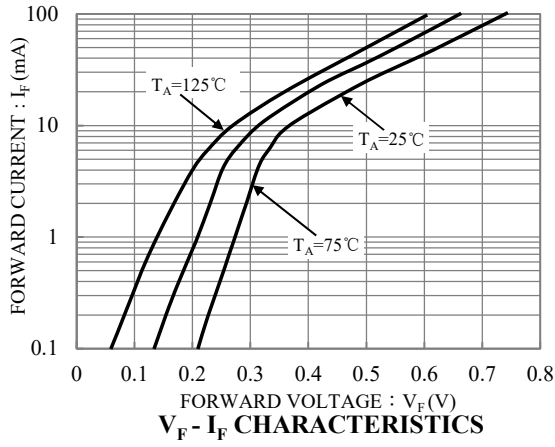
Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 100\mu\text{A}$	$V_{(BR)R}$	45	-	-	V
Forward Voltage	$I_F = 10\text{mA}$	V_F	-	-	450	mV
Reverse Current	$V_R = 10\text{V}$	I_R	-	-	1	μA
Capacitance Between Terminals	$V_R = 10\text{V}$, $f = 1\text{MHz}$	C_T	-	2	-	pF



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RATINGS AND CHARACTERISTIC CURVES

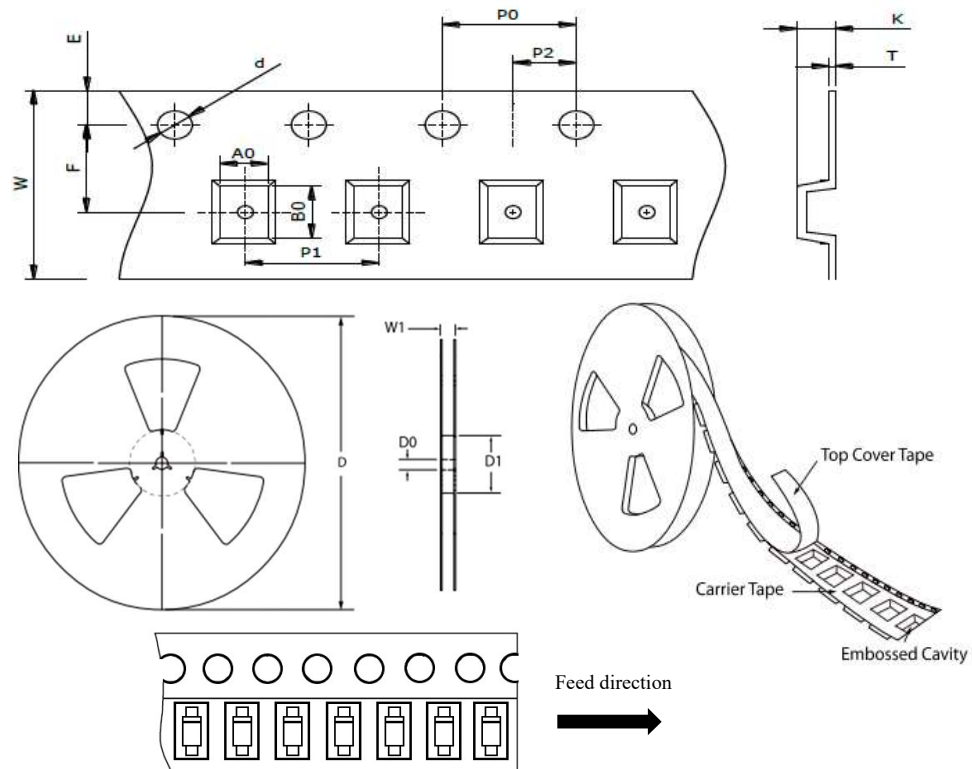




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TAPE & REEL SPECIFICATION



Unit: mm

Item	Symbol	SOD-323G
Carrier width	A ₀	1.50 ± 0.10
Carrier length	B ₀	2.95 ± 0.10
Carrier depth	K	1.20 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	13.00 ± 0.50
Reel inner diameter	D ₁	MIN. 50.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	MAX. 0.60
Tape width	W	8.00 ± 0.20
Reel width	W ₁	MAX. 10.00

ORDER INFORMATION

Package	Reel Size	Quantity
SOD-323G	7"	3,000

MARKING CODE

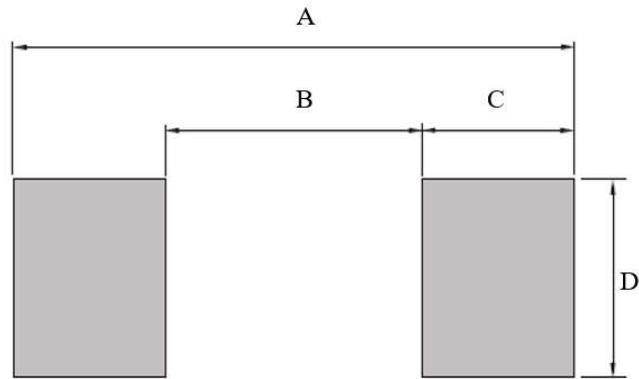
Part Number	Marking Code
RB500V-40WSGH	S9



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SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D
SOD-323G	2.90	1.30	0.80	0.90