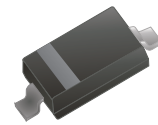


RB751V-40

$I_o = 30 \text{ mA}$

$V_R = 30 \text{ Volts}$

RoHS Device

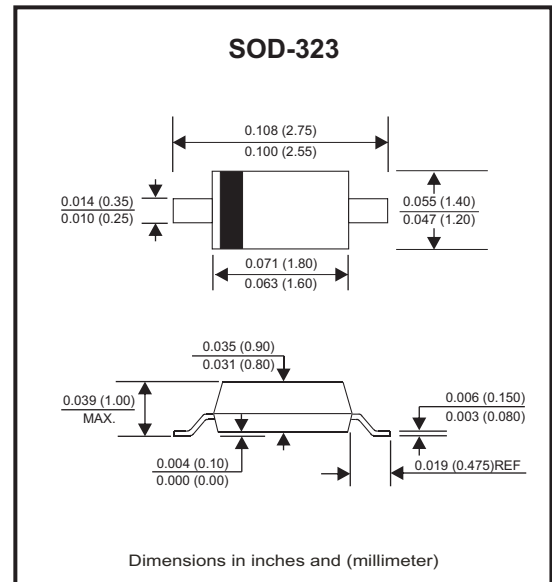


Features

- Low current rectifier.
- Low voltage, low inductance.
- For power supply.

Mechanical data

- Case: SOD-323, Standard package, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026
- Mounting position: Any
- Weight: 0.01 grams(approx.)



Circuit diagram



Maximum Ratings (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Limit	Unit
Peak reverse voltage		V_{RM}	40	V
DC reverse voltage		V_R	30	V
Mean rectifying current		I_o	30	mA
Non-repetitive peak forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	0.2	A
Power dissipation		P_D	200	mW
Thermal resistance	Junction to ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction temperature range		T_J	-40 ~ +125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 ~ +150	$^\circ\text{C}$

Electrical Characteristics (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=1\text{mA}$	V_F			0.37	V
Reverse current	$V_R=30\text{V}$	I_R			0.50	μA
Capacitance between terminals	$V_R=1\text{V}$, $f=1\text{MHz}$	C_T		2		pF

RATING AND CHARACTERISTIC CURVES (RB751V-40)

Fig.1 - Power Derating Curve

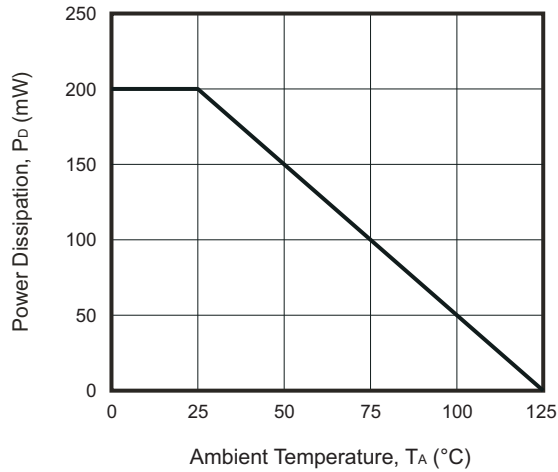


Fig.2 - Capacitance Characteristics

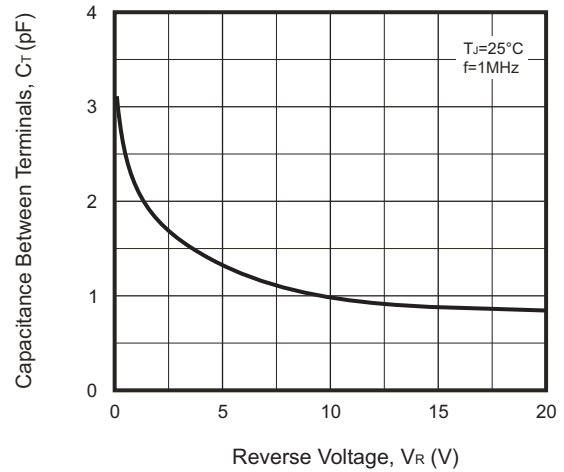


Fig.3 - Forward Characteristics

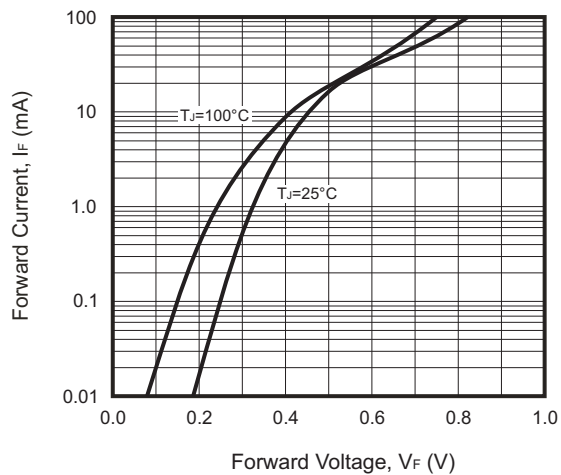
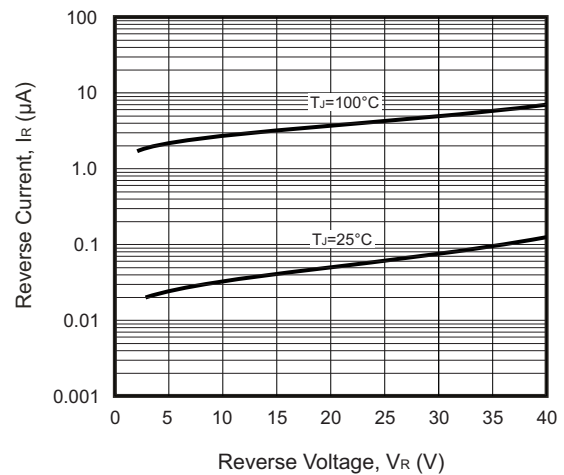
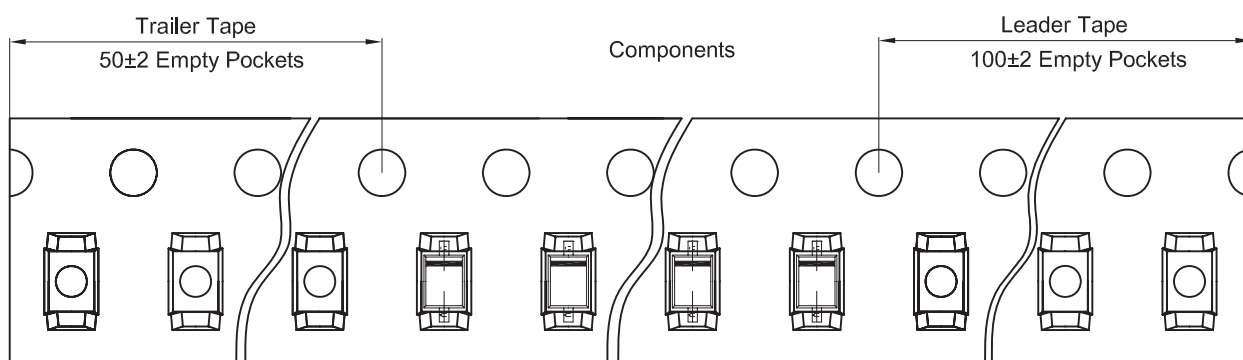
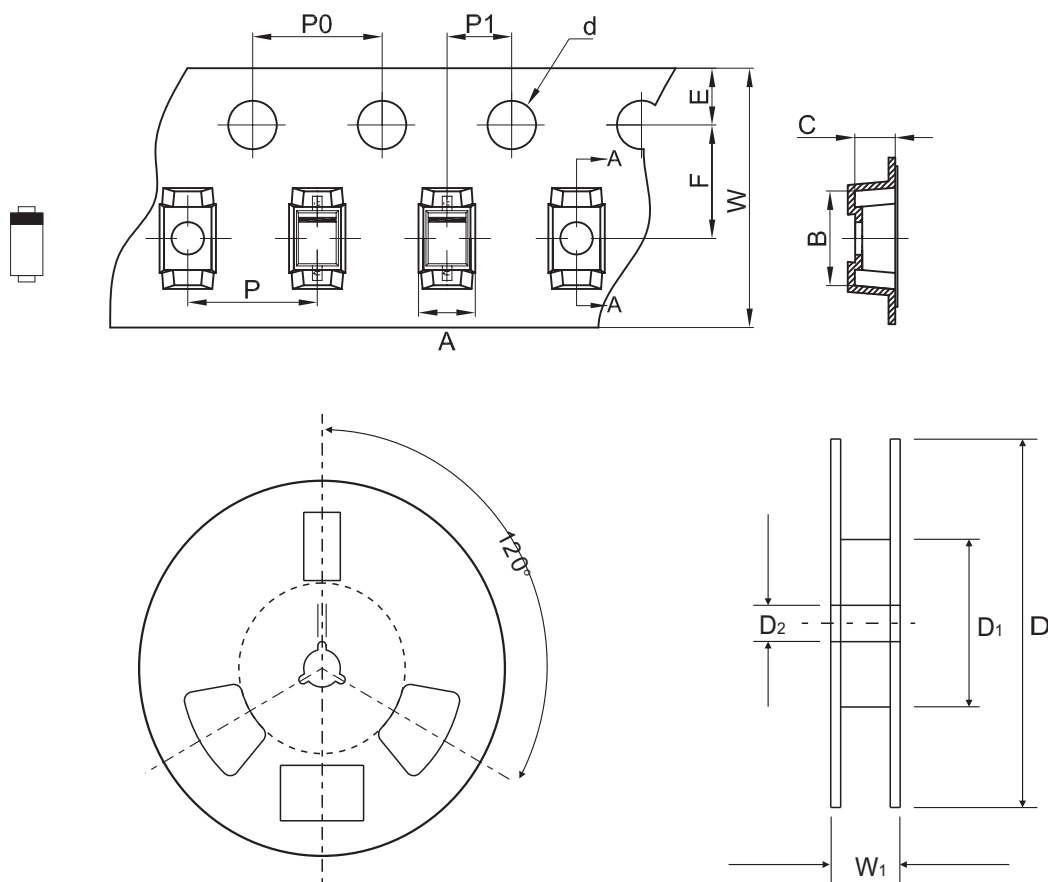


Fig.4 - Reverse Characteristics



Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.48 ± 0.05	3.30 ± 0.05	1.25 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.058 ± 0.002	0.130 ± 0.002	0.049 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	$8.00 \pm 0.30 / - 0.10$	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.004	$0.315 \pm 0.012 / - 0.004$	0.484 ± 0.039

Marking Code

Part Number	Marking Code
RB751V-40	5



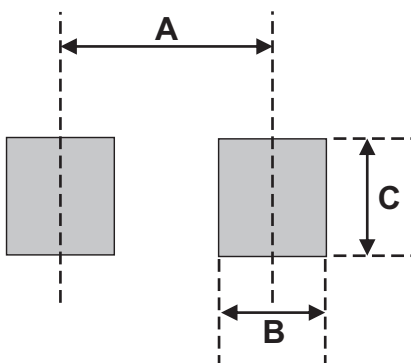
■ = The marking bar indicates the cathode.

Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.15	0.085
B	0.70	0.028
C	0.70	0.028

Note:

- 1.General tolerance: $\pm 0.05\text{mm}$.
- 2.The pad layout is for reference purposes only.



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7

Mouser Electronics

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