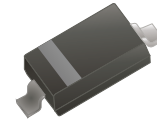


RB501V-40-HF

RoHS Device
Halogen Free



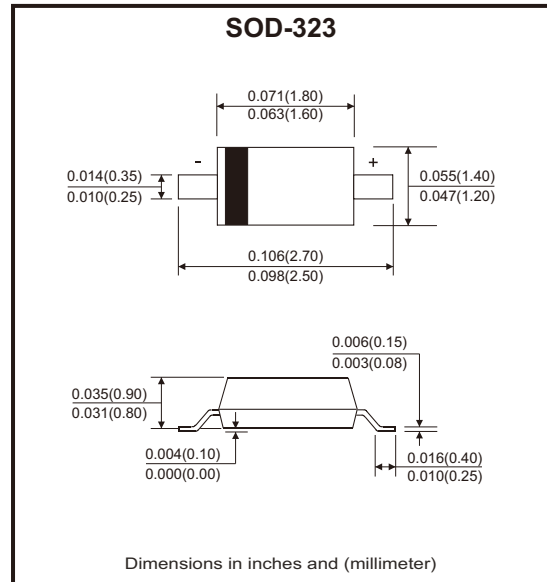
Features

- High current capability.
- Low forward voltage drop.

Mechanical Data

- Case: SOD-323, molded plastic.
- Polarity: Indicated by cathode end.
- Mounting position: Any.

Circuit Diagram



Maximum Ratings (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.1	A
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	1	A
Typical thermal resistance	$R_{\theta JA}$	500	°C/W
Power dissipation	P_D	200	mW
Junction temperature	T_J	125	°C
Storage temperature range	T_{STG}	-40 to +125	°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Maximum forward voltage	$I_F = 100mA$ $I_F = 10mA$	V_F			0.55 0.34	V
Maximum reverse current	$V_R = 10V$	I_R			30	μA
Capacitance between terminals	$V_R = 10V, f = 1MHz$	C_T		6		pF

Typical Rating and Characteristic Curves (RB501V-40-HF)

Fig.1 - Forward Characteristics

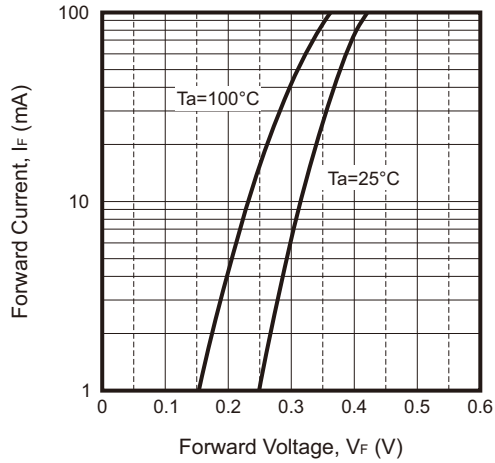


Fig.2 - Reverse Characteristics

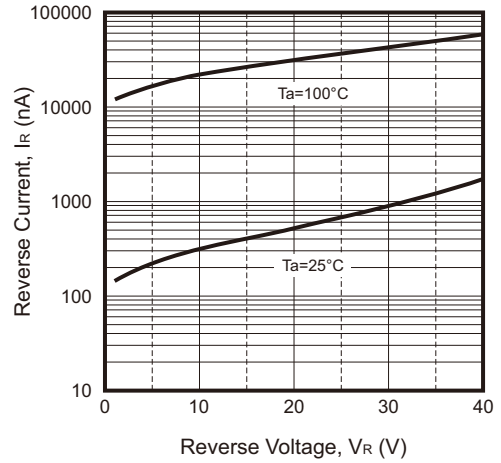


Fig.3 - Capacitance Characteristics

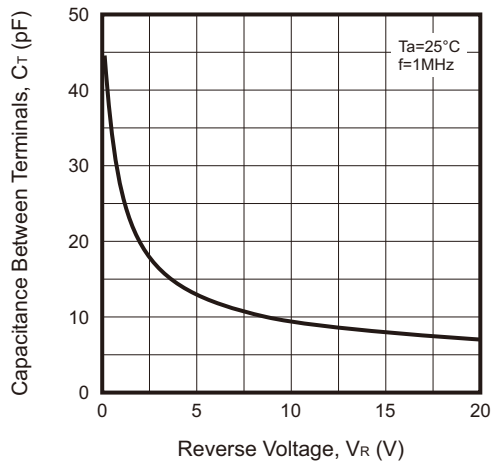
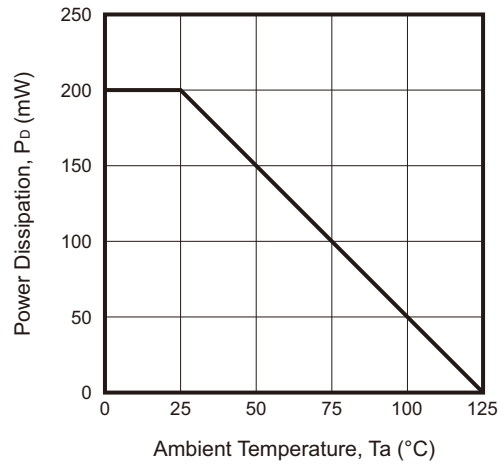
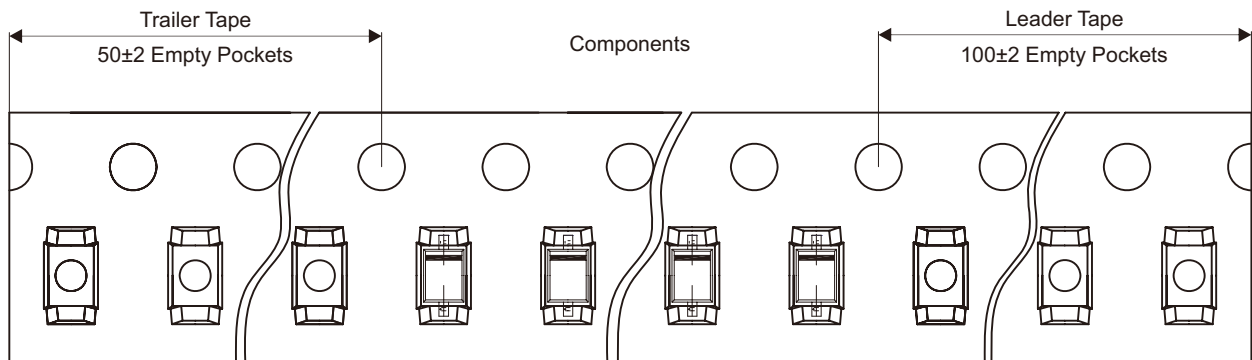
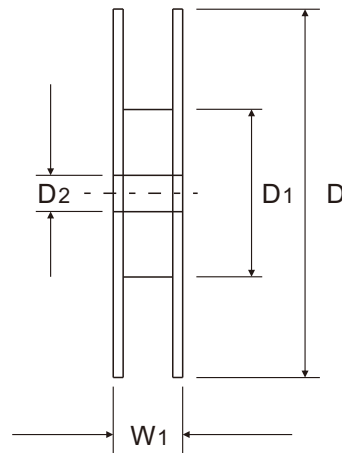
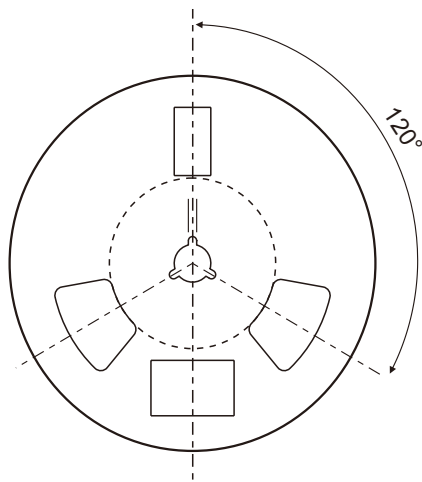
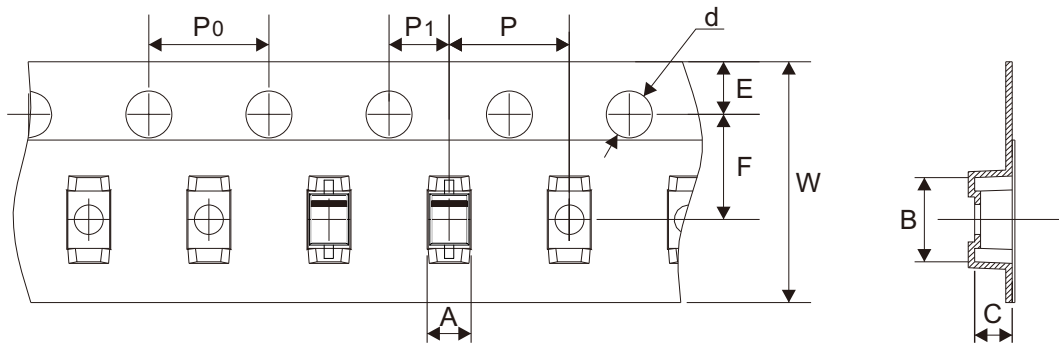


Fig.4 - Power Derating Curve



Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.05	2.90 ± 0.05	1.25 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.057 ± 0.002	0.114 ± 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 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

Marking Code

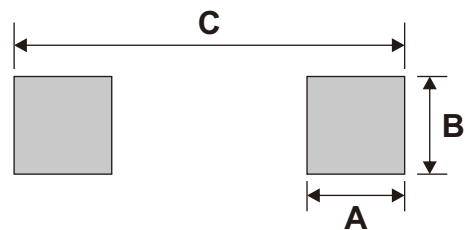
Part Number	Marking Code
RB501V-40-HF	4



■ = Cathode band

Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	0.80	0.031
B	0.80	0.031
C	3.00	0.118



Standard Packaging

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