

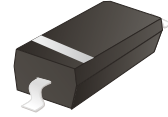
CDBW120-HF Thru. CDBW140-HF

Forward current: 1.0A

Reverse voltage: 20 to 40V

RoHS Device

Halogen Free

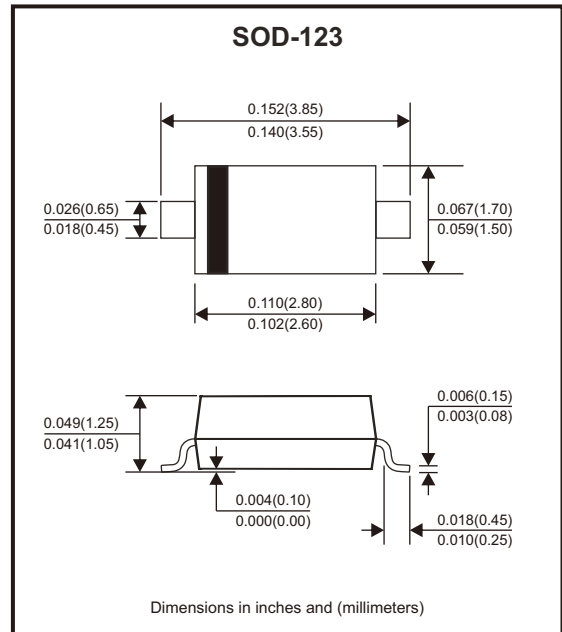


Features

- High current capability.
- Low forward voltage drop.

Mechanical Data

- Case: SOD-123, molded plastic.
- Polarity: Color band denotes cathode end.
- Epoxy UL: 94V-0.
- Mounting position: Any.



Circuit Diagram



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

Parameter	Symbol	CDBW120-HF	CDBW130-HF	CDBW140-HF	Unit
Max. repetitive peak reverse voltage	V _{RRM}	20	30	40	V
Max. RMS voltage	V _{RMS}	14	21	28	V
Max. DC blocking voltage	V _{DC}	20	30	40	V
Max. average forward rectified current	I _{FM}	1			A
Peak forward surge current 8.3ms single half sine-wave	I _{FSM}	9			A
Typical thermal resistance	R _{θJA}	250			°C/W
Power dissipation	P _D	500			mW
Storage temperature range	T _{STG}	-55 ~ +150			°C

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

Parameter	Conditions	Symbol	CDBW120-HF	CDBW130-HF	CDBW140-HF	Unit
Maximum forward voltage	I _F = 1.0A	V _F	0.450	0.550	0.600	V
	I _F = 3.0A		0.750	0.875	0.900	
Maximum reverse breakdown voltage	I _R = 1mA	V _R	20	30	40	V
Maximum reverse current	V _R = 20V CDBW120 V _R = 30V CDBW130 V _R = 40V CDBW140	I _R	1			mA
Type junction capacitance	V _R = 4V, f = 1MHz	C _j	120			pF

Rating and Characteristic Curves (CDBW120-HF Thru. CDBW140-HF)

Fig.1 - Forward Characteristics

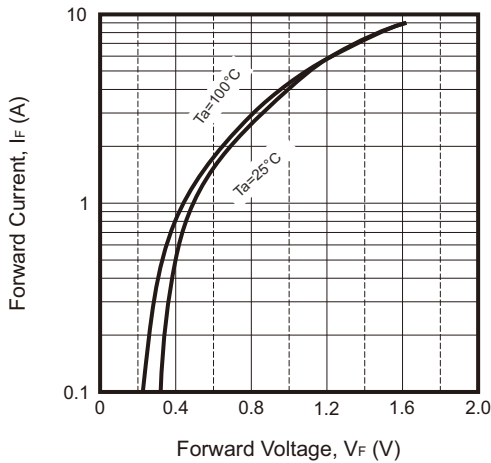


Fig.2 - Reverse Characteristics

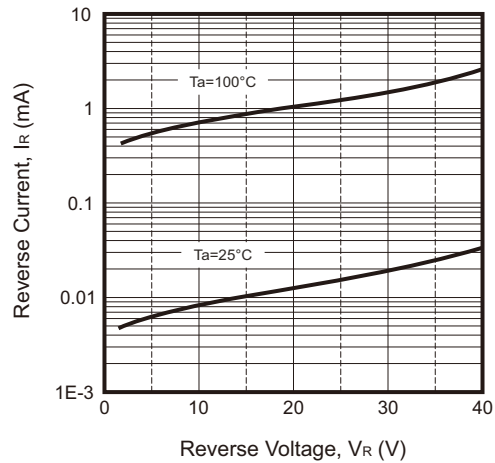


Fig.3 - Capacitance Characteristics

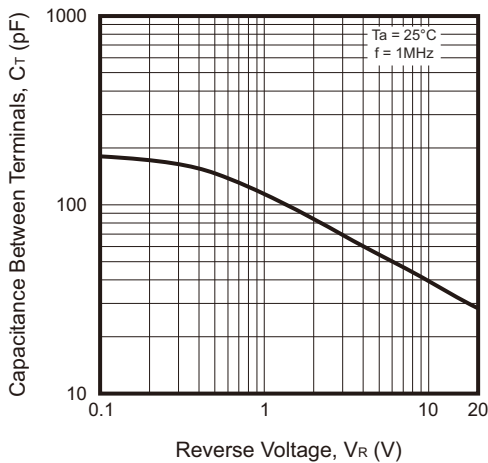
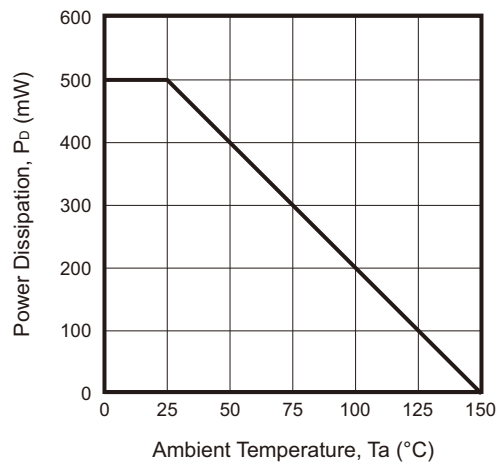
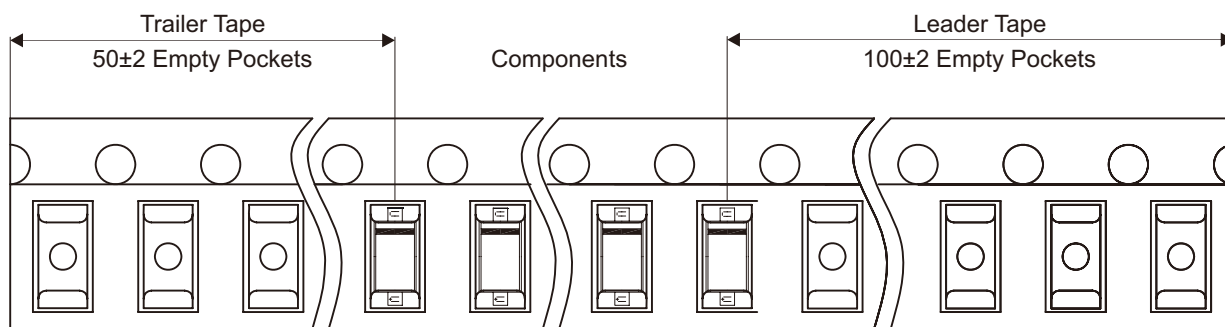
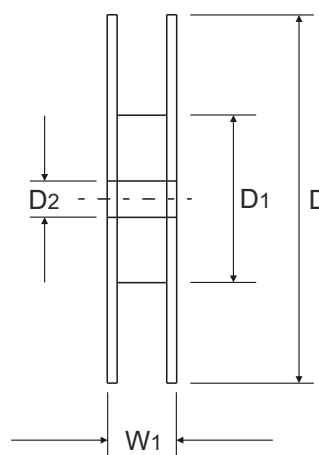
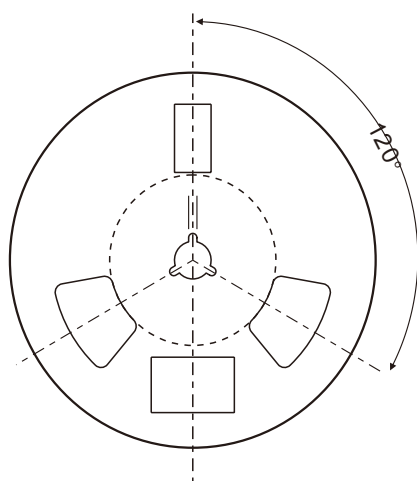
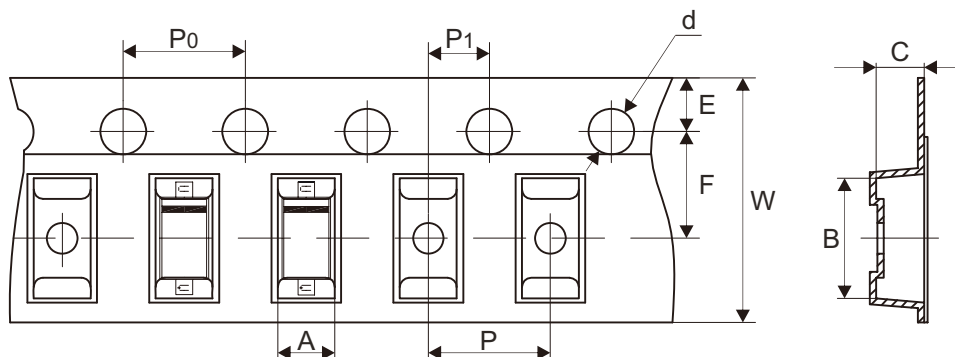


Fig.4 - Power Derating Curve



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.05	3.94 ± 0.05	1.57 ± 0.05	1.55 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.155 ± 0.002	0.062 ± 0.002	0.061 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-123	SYMBOL	E	F	P	P1	P0	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	4.00 ± 0.10	8.00 + 0.06 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.315 + 0.002 - 0.004	0.484 ± 0.039