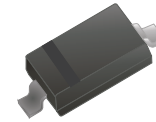


CDBW01540RF-HF / CDBW01560RF-HF

Reverse Voltage: 40 V / 60 V

Forward Current: 15 mA

RoHS Device
Halogen Free



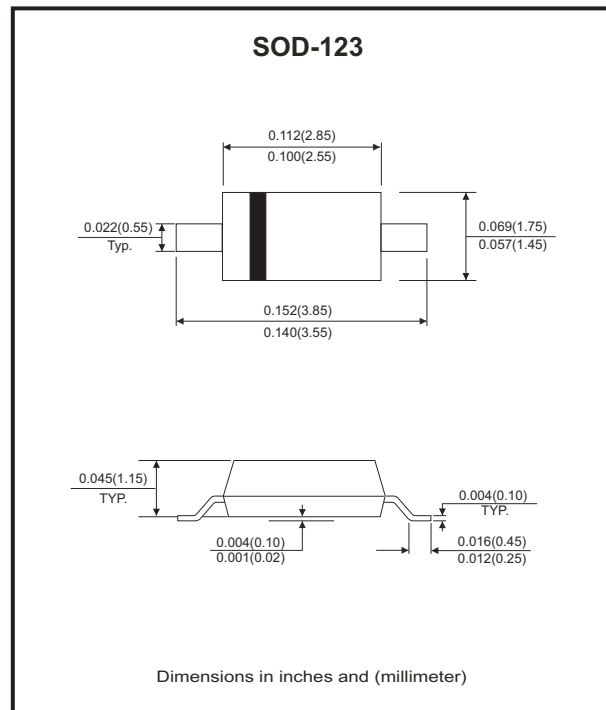
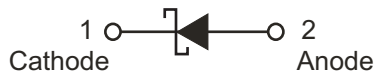
Features

- Low forward voltage drop.
- Guard ring construction for transient protection.
- Negligible reverse recovery time.

Mechanical data

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, method 2026.
- Weight: 0.0097 grams(approx.).

Circuit Diagram



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

Parameter		Symbol	CDBW01540RF-HF	CDBW01560RF-HF	Unit
Repetitive peak reverse voltage		V_{RRM}	40	60	V
Working peak		V_{RWM}			
DC reverse voltage		V_R			
RMS reverse voltage		V_{RMS}	28	42	V
Repetitive peak forward current	@t<1.0s	I_{FRM}	50		mA
	@t=10μS		2.0		A
Forward continuous current		I_{FM}	15		mA
Power dissipation		P_D	400		mW
Thermal resistance junction to ambient		$R_{θJA}$	300		°C/W
Junction and Storage temperature range		T_J, T_{STG}	-65 to +125		°C

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

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	CDBW01540RF-HF	$V_{(BR)R}$	$I_R=10\mu A$	40			V
	CDBW01560RF-HF			60			
Forward voltage	CDBW01540RF-HF	V_{F1}	$I_F=1.0mA$			0.39	V
	CDBW01560RF-HF					0.41	
	CDBW01540RF-HF	V_{F2}	$I_F=15mA$			0.90	
	CDBW01560RF-HF					1.00	
Reverse current	CDBW01540RF-HF	I_{RM}	$V_R=30V$			0.2	μA
	CDBW01560RF-HF		$V_R=50V$			0.2	
Capacitance between terminals	CDBW01540RF-HF	C_T	$V_R=0, f=1MHz$			2.2	pF
	CDBW01560RF-HF					2.0	
Reverse recovery time		t_{rr}	$I_R=I_F=5mA$ $I_{rr}=0.1*I_R, R_L=100\Omega$			1.0	ns

RATING AND CHARACTERISTIC CURVES (CDBW01540RF-HF/CDBW01560RF-HF)

Fig.1 - Power Derating Curve

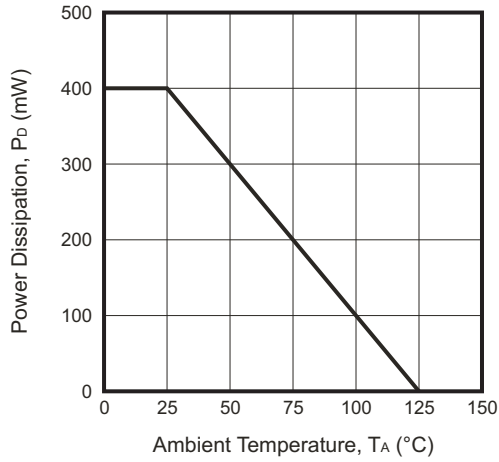


Fig.2 - Typical Forward Characteristics

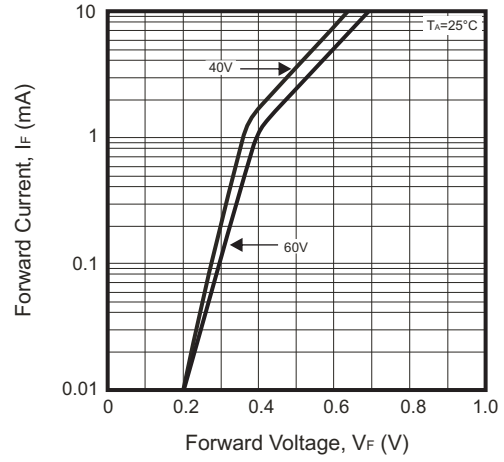


Fig.3 - Typical Junction Capacitance vs. Reverse Voltage

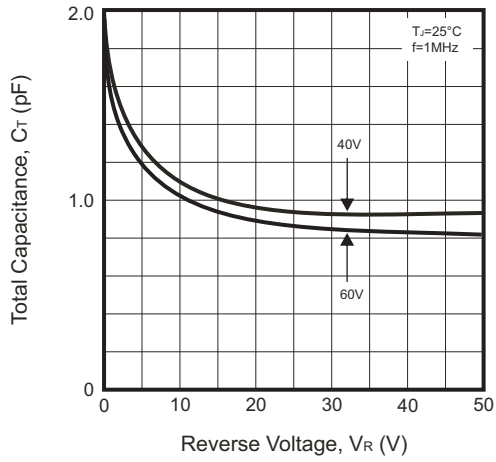
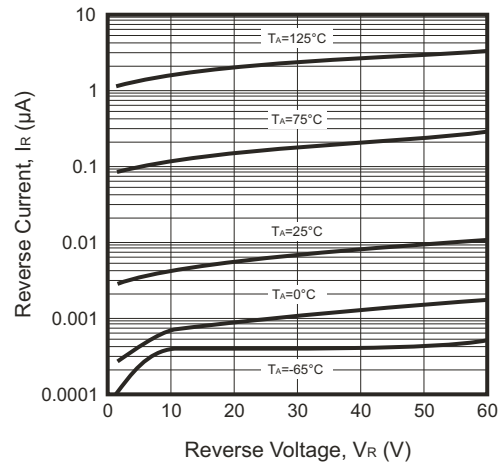
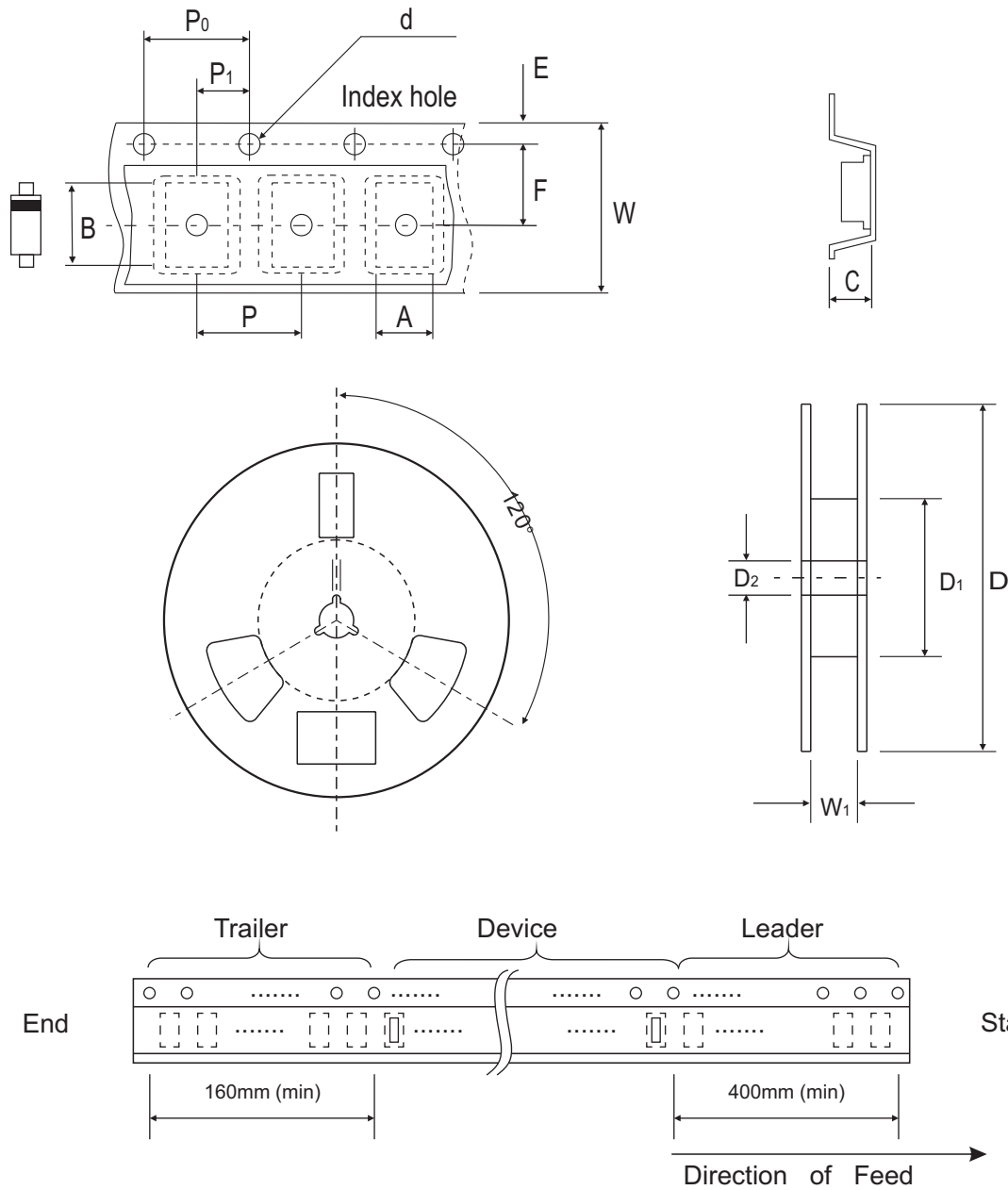


Fig.4 - Typical Reverse Characteristics



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.10	3.94 ± 0.10	1.57 ± 0.10	1.55 ± 0.05	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.073 ± 0.004	0.155 ± 0.004	0.062 ± 0.004	0.061 ± 0.002	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

SOD-123	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 +0.20/-0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.002	0.315 +0.008/-0.004	0.374 ± 0.039

Marking Code

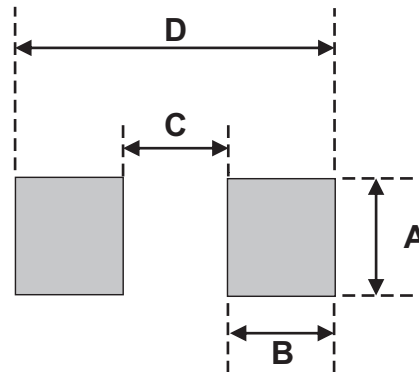
Part Number	Marking Code
CDBW01540RF-HF	S3
CDBW01560RF-HF	S1



xx = Product type marking code

Suggested PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	1.22	0.048
B	0.91	0.036
C	2.36	0.093
D	4.19	0.165



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123	3,000	7