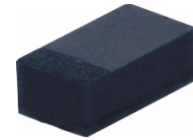


## CDBFR0130L-HF

**$I_o = 100 \text{ mA}$**   
 **$V_R = 30 \text{ Volts}$**   
**RoHS Device**  
**Halogen Free**

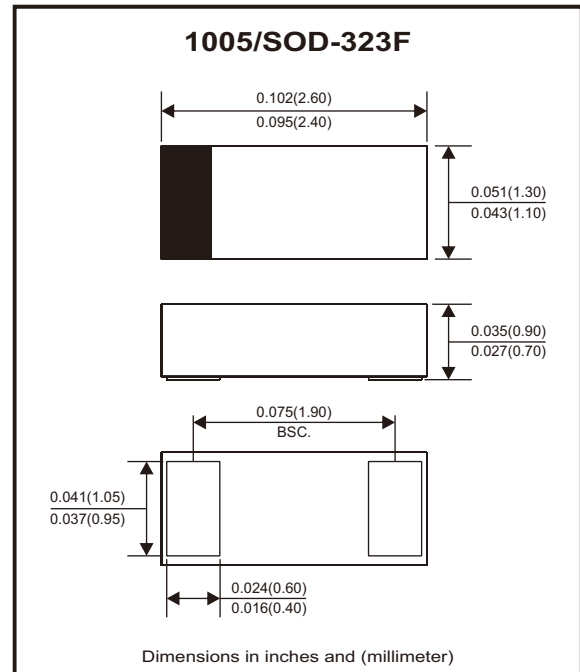


### Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Majority carrier conduction.

### Mechanical data

- Case: 1005/SOD-323F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.006 grams (approx.).



### Circuit Diagram



### Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		$V_{RRM}$			35	V
Reverse voltage		$V_R$			30	V
Average forward current		$I_o$			100	mA
Forward current, surge peak	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$			1	A
Junction temperature		$T_j$			+125	°C
Storage temperature		$T_{STG}$	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 10\text{mA}$	$V_F$			0.35	V
Reverse current	$V_R = 10\text{V}$	$I_R$			10	μA

## Rating and Characteristic Curves (CDBFR0130L-HF)

Fig.1 - Forward Characteristics

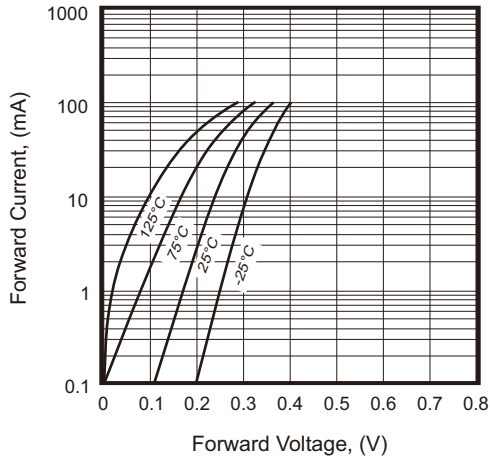


Fig.2 - Reverse Characteristics

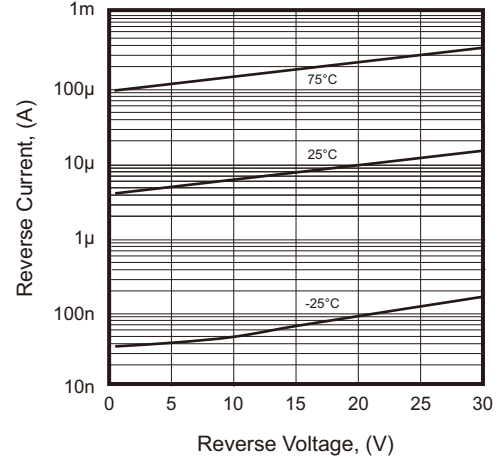


Fig.3 - Capacitance Between Terminals Characteristics

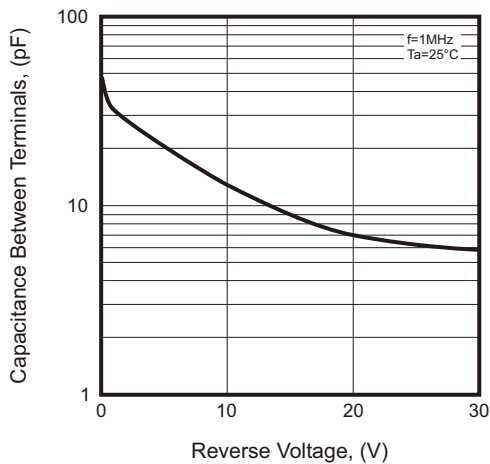
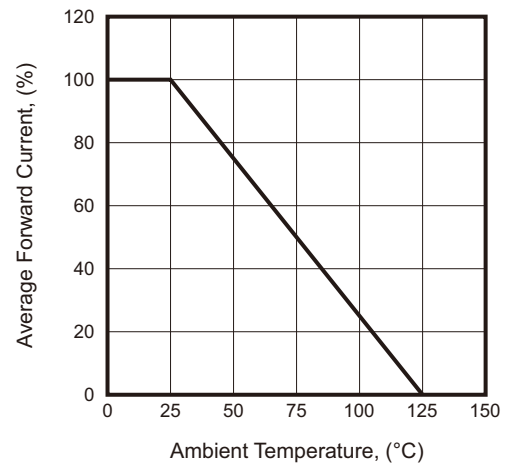
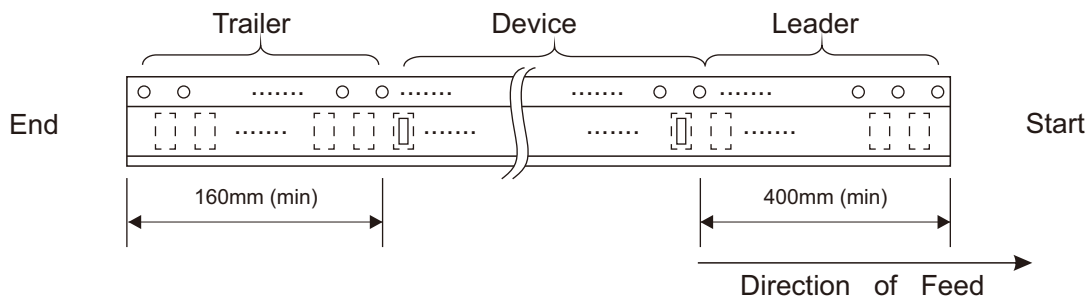
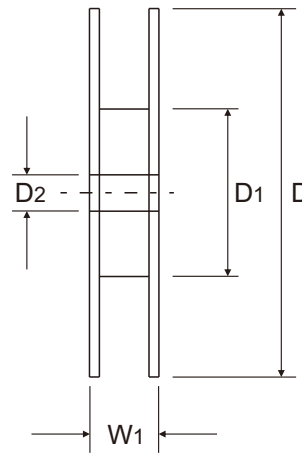
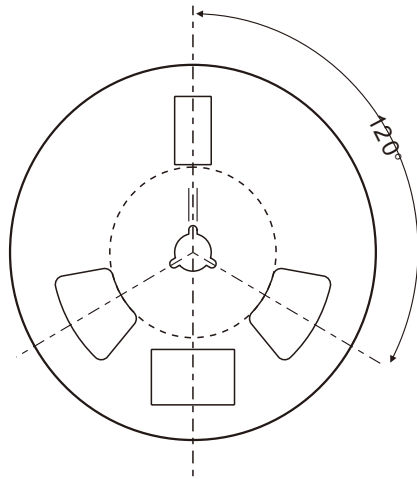
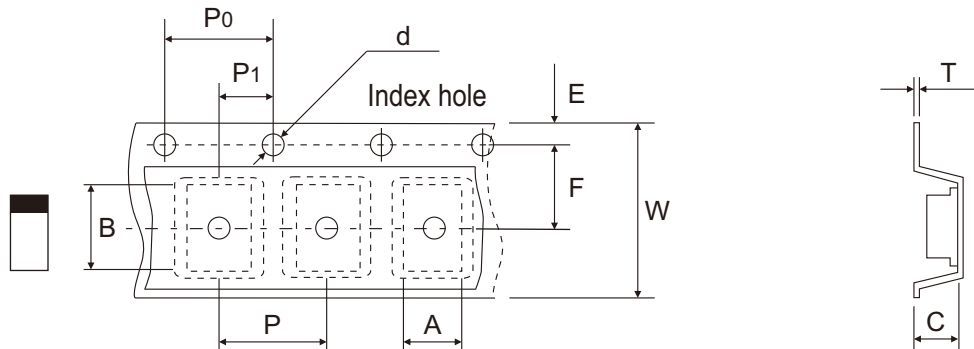


Fig.4 - Current Derating Curve



## Reel Taping Specification



1005 (SOD-323F)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	1.45 ± 0.05	2.80 ± 0.05	1.00 ± 0.05	1.50 + 0.10 - 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.057 ± 0.002	0.110 ± 0.002	0.039 ± 0.002	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

1005 (SOD-323F)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.10	12.00 + 0.50 - 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.002	0.315 ± 0.004	0.472 + 0.020 - 0.000

Company reserves the right to improve product design, functions and reliability without notice.

REV:B

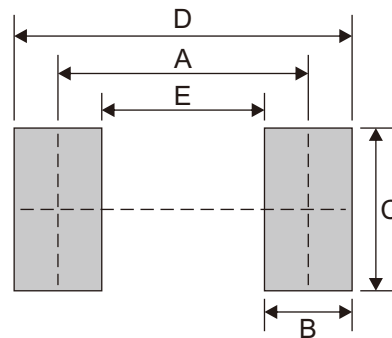
## Marking Code

Park Number	Marking Code
CDBFR0130L-HF	BP



## Suggested P.C.B. PAD Layout

SIZE	1005/SOD-323F	
	(mm)	(inch)
A	2.00	0.079
B	0.70	0.028
C	1.30	0.051
D	2.70	0.106
E	1.30	0.051



## Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
1005/SOD-323F	4,000	7