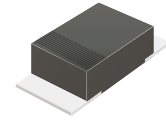


## CDBVF240-HF

### 2.0A Low VF Surface Mount Schottky Barrier Rectifiers-40V

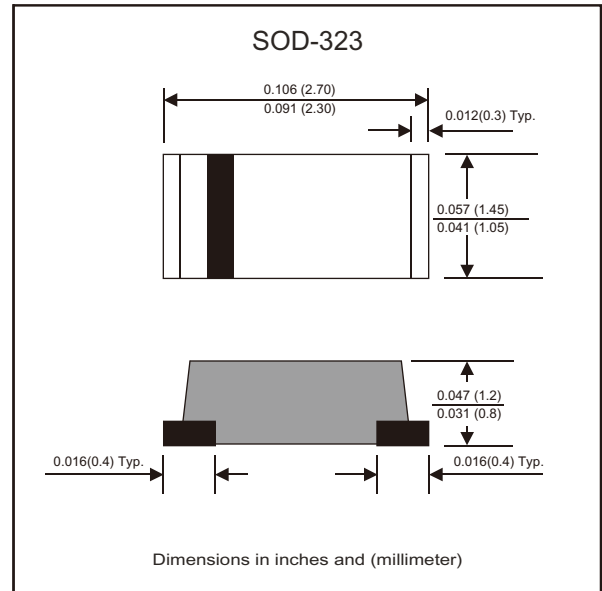


#### Features

- \*High current density schottky
- \*Low power loss,high efficiency
- \*High current capability,low forward voltage drop
- \*High surge capability
- \*Very tiny plastic SMD package
- \*Lead-free parts meet RoHS requirements
- \*Suffix"-H" indicates Halogen-free part

#### Mechanical data

- \*Epoxy : UL94-V0 rated flame retardant
- \*Case : Molded plastic,SOD-323
- \*Terminals : Plated terminals,solderable per MIL-STD-750, Method 2026
- \*Polarity : Indicated by cathode band
- \*Mounting Position : Any
- \*Weight : Approximated 0.008 gram



#### Circuit Diagram



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

Parameter	Symbol	CDBVF240-HF	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	40	V
Maximum RMS voltage	V <sub>RMS</sub>	28	V
Continuous reverse voltage	V <sub>R</sub>	40	V
Maximum forward voltage @IF=2.0A, TJ=25 °C	V <sub>F</sub>	0.48	V
Forward rectified current	I <sub>O</sub>	2.0	A
Non-repetitive peak forward surge current 1.0ms square-wave	I <sub>FSM</sub>	30	A
Maximum reverse current	V <sub>R</sub> =V <sub>RRM</sub> @T <sub>J</sub> =25 °C	0.5	mA
	V <sub>R</sub> =V <sub>RRM</sub> @T <sub>J</sub> =100 °C	20	
Typ. Thermal resistance,junction to ambient air (Note1)	R <sub>θJA</sub>	80	°C/W
Typ. Thermal resistance,junction to case (Note1)	R <sub>θJC</sub>	70	°C/W
Operating junction temperature	T <sub>J</sub>	-55 to +100	°C
Storage temperature	T <sub>STG</sub>	-65 to +175	°C

Note 1: Mounted on aluminum substrate

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

Fig.1- Typical Forward Current Derating Curve

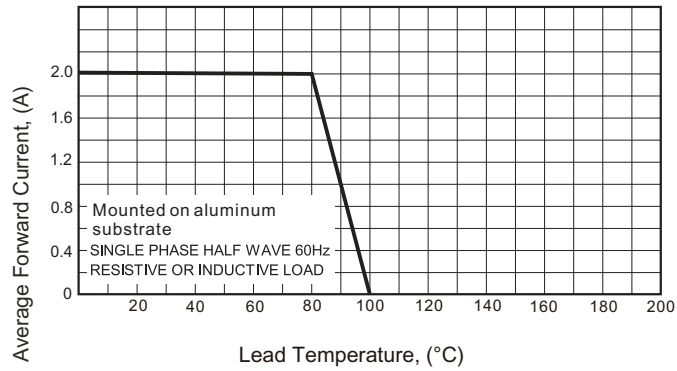


Fig.2- Typical Forward Characteristics

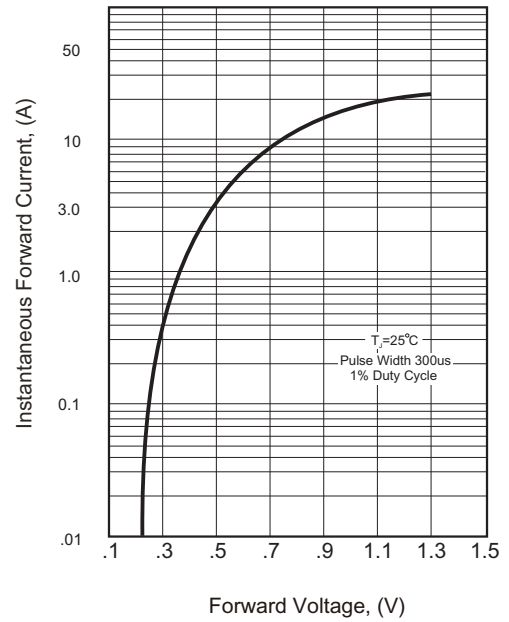


Fig.5- Typical Reverse Characteristics

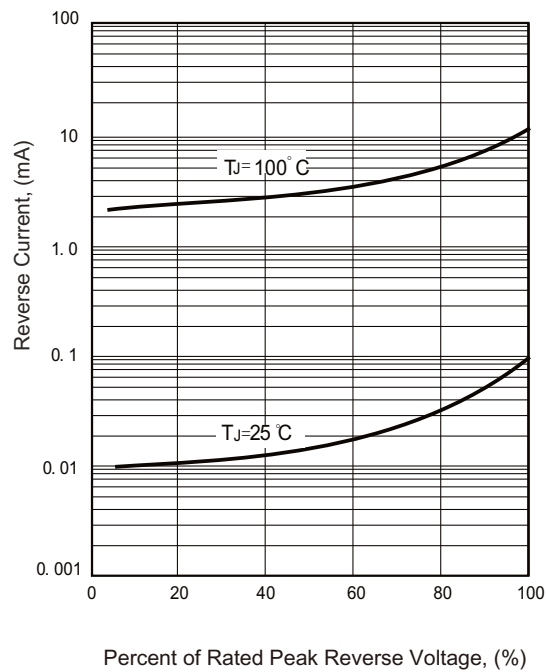
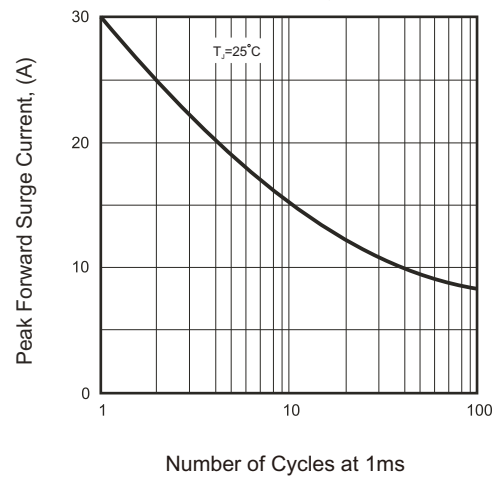
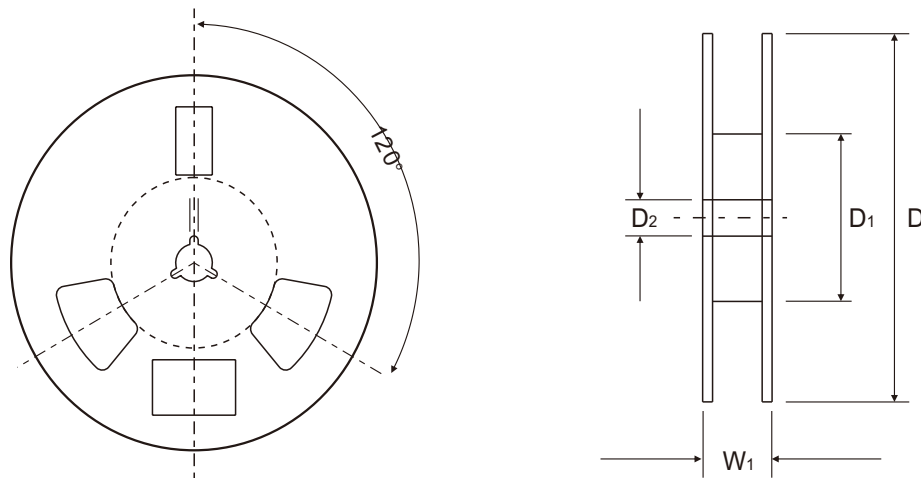
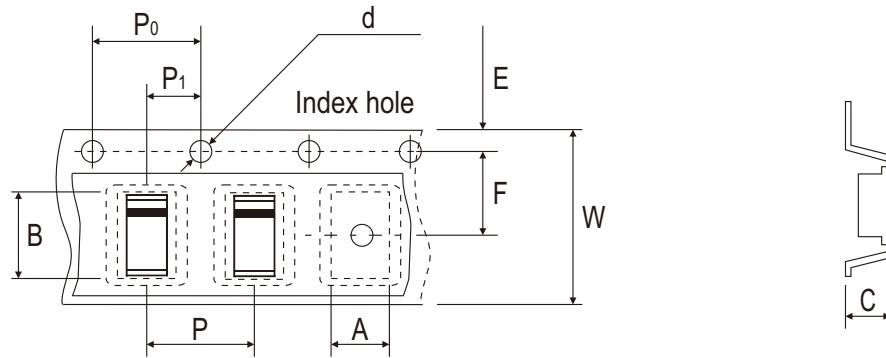


Fig.4 - Maximum Non-repetitive Forward Surge Current



## Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.47 ± 0.10	2.95 ± 0.10	1.15 ± 0.10	1.50 ± 0.10	178 ± 2	62.0 MIN.	13.00 ± 0.50
	(inch)	0.058 ± 0.004	0.116 ± 0.004	0.045 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.441 MIN.	0.512 ± 0.020

SOD-323	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	W	W <sub>1</sub>
	(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	11.4 ± 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	0.449 ± 0.039

## Marking Code

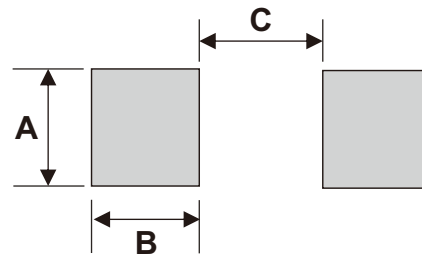
Part Number	Marking Code
CDBVF240-HF	L4



XX=Product type marking code

## Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
<b>A</b>	1.50	0.059
<b>B</b>	1.00	0.039
<b>C</b>	1.30	0.051



## Standard Packaging

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
<b>SOD-323</b>	3,000	7