



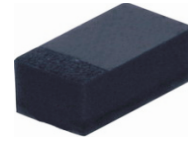
**THE DATASHEET OF  
CDBQR0230L-HF**



# SMD Schottky Barrier Diode

## CDBQR0230L-HF

$I_o = 200 \text{ mA}$   
 $V_R = 30 \text{ Volts}$   
 RoHS Device  
 Halogen Free

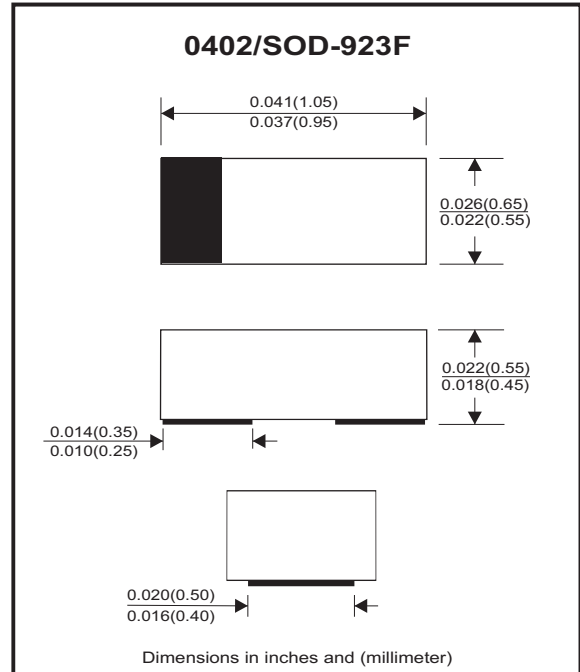


### Features

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

### Mechanical data

- Case: 0402/SOD-923F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking code: cathode band & BA
- Mounting position: Any.
- Weight: 0.001 grams(approx.).



### Maximum Rating (at $T_A=25^\circ\text{C}$ 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		$I_o$			200	mA
Forward current, surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method) * 1cycle	$I_{FSM}$			1	A
Power dissipation		$P_D$			125	mW
Junction temperature range		$T_J$	-40		+125	$^\circ\text{C}$
Storage temperature range		$T_{STG}$	-40		+125	$^\circ\text{C}$

### Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 200\text{mA}$	$V_F$			0.5	V
Reverse current	$V_R = 10\text{V}$	$I_R$			30	$\mu\text{A}$

## RATING AND CHARACTERISTIC CURVES (CDBQR0230L-HF)

Fig. 1 - Forward characteristics

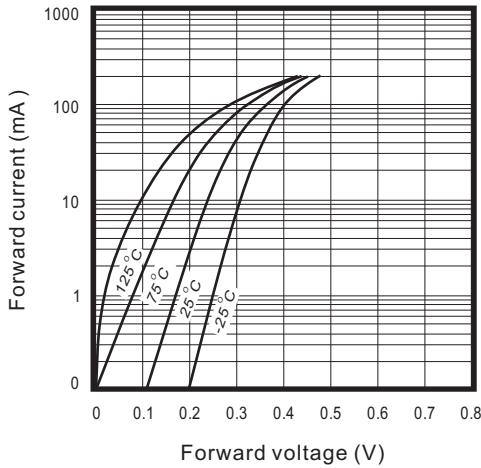


Fig. 2 - Reverse characteristics

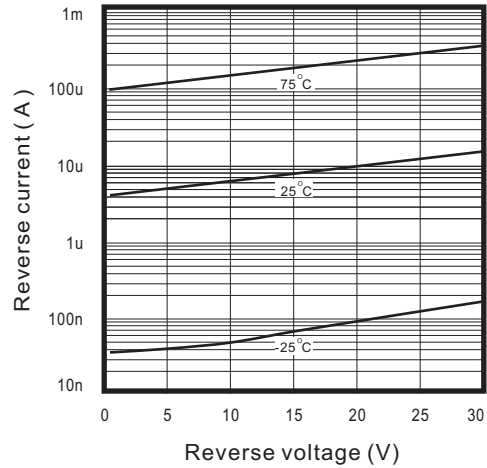


Fig.3 - Capacitance between terminals characteristics

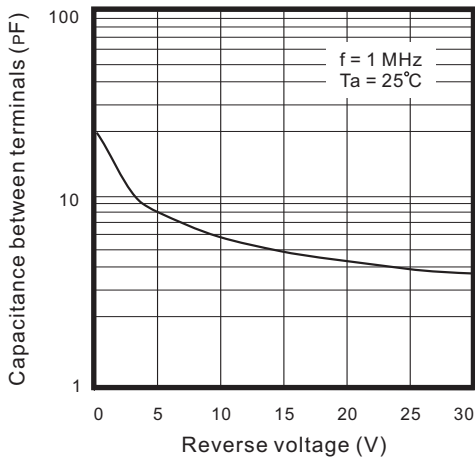


Fig.4 - Current derating curve

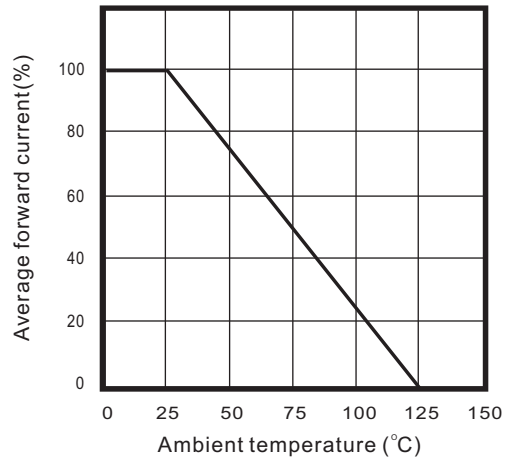


Fig. 5 - VF Dispersion map

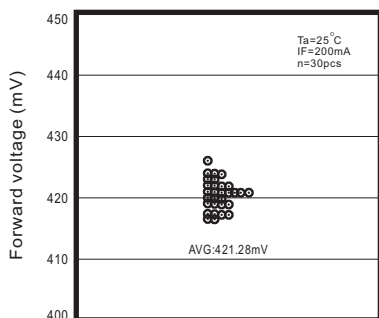


Fig. 6 - IR Dispersion map

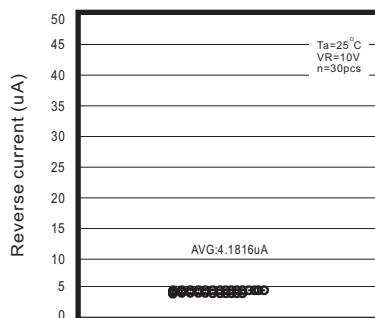
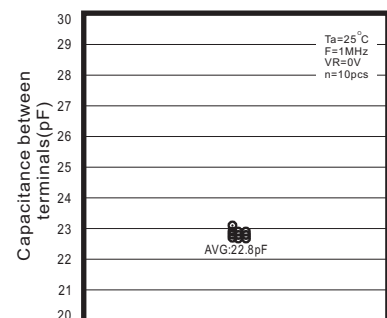
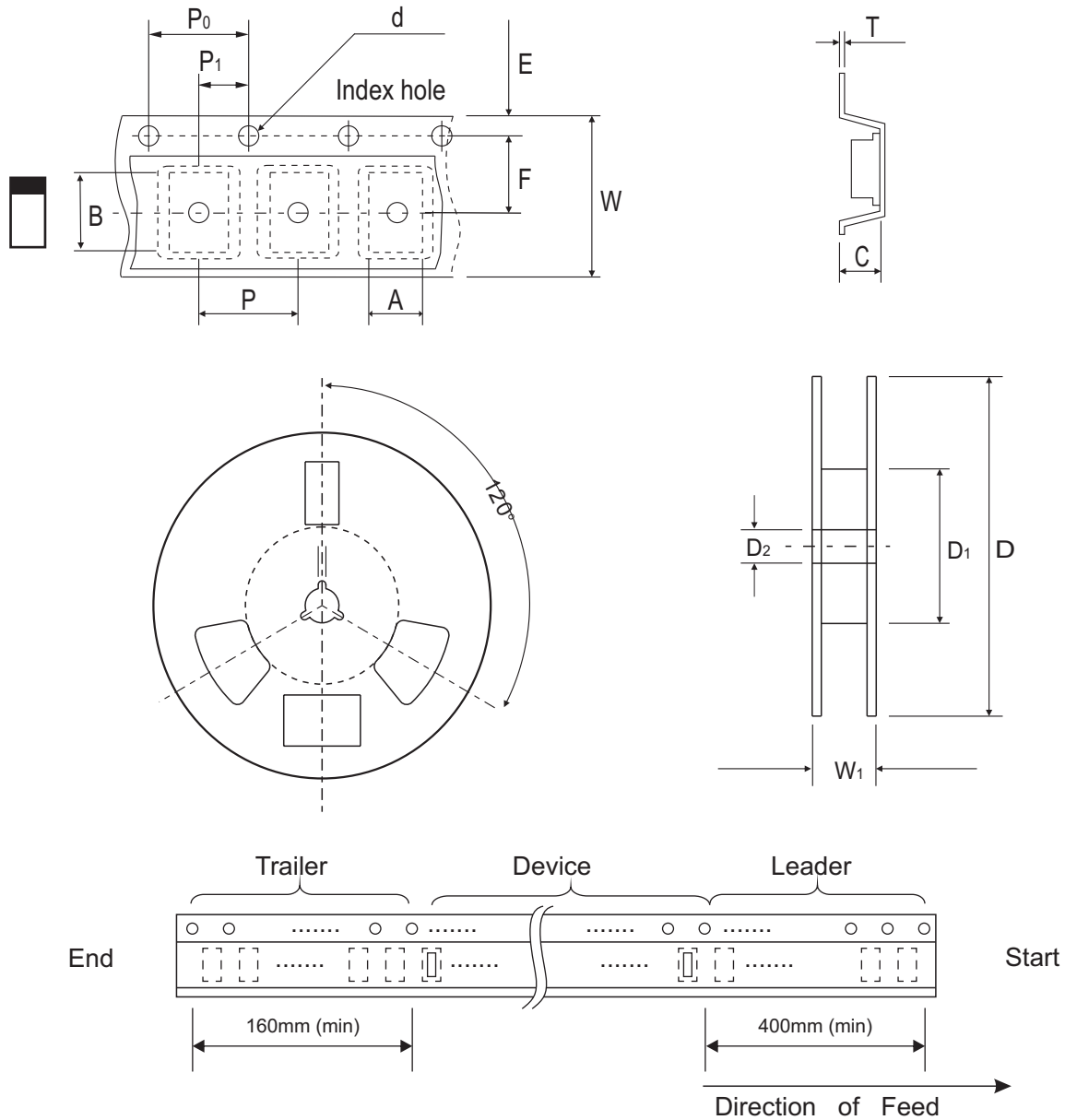


Fig. 7 - CT Dispersion map



## Reel Taping Specification



0402 (SOD-923F)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	0.75 ± 0.05	1.17 ± 0.05	0.65 ± 0.05	1.50 + 0.10 - 0	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.030 ± 0.002	0.046 ± 0.002	0.026 ± 0.002	0.059 + 0.004 - 0	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

0402 (SOD-923F)	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 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.20 + 0.02 - 0.05	8.00 ± 0.20	12.00 + 0.50 - 0
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.008 + 0.001 - 0.002	0.315 ± 0.008	0.472 + 0.020 - 0

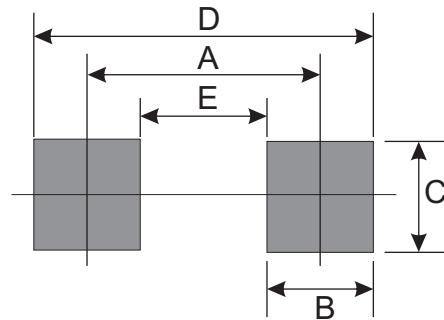
## Marking Code

Part Number	Marking Code
CDBQR0230L-HF	BA



## Suggested PAD Layout

SIZE	0402/SOD-923F	
	(mm)	(inch)
A	0.75	0.030
B	0.50	0.020
C	0.70	0.028
D	1.25	0.049
E	0.25	0.010





## Standard Packaging

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0402/SOD-923F	5,000	7

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