

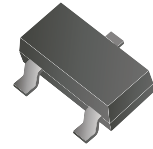
## CDBT0230-HF

Reverse Voltage: 30 Volts

Forward Current: 200 mA

RoHS Device

Halogen Free



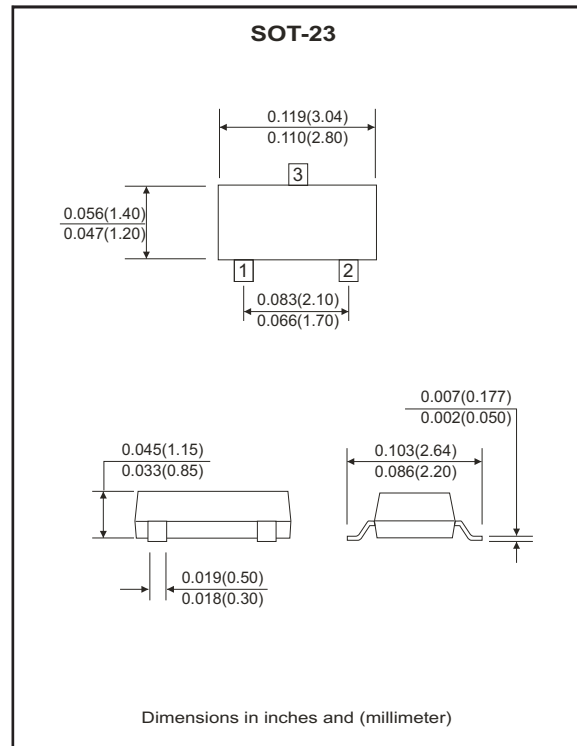
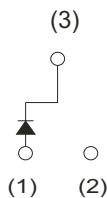
### Features

- Small surface mounting type.
- Low IR.(IR=10uA Typ.)
- High reliability.

### Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.

### Circuit diagram



### Maximum Ratings and Electrical Characteristics

(at Ta=25 °C unless otherwise noted)

Parameter	Symbol	Value	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	30	V
Maximum RMS voltage	$V_{RMS}$	21	V
Maximum DC blocking voltage	$V_{DC}$	30	V
Maximum average forward rectified current	$I_o$	0.2	A
Peak forward surge current at 8.3m sec single half sine-wave	$I_{FSM}$	3.0	A
Maximum instantaneous forward voltage at $I_F=0.2A$	$V_F$	0.5	V
Maximum average reverse current at $V_R(1)=30V$	$I_{R(1)}$	5	uA
Maximum average reverse current at $V_R(2)=10V$	$I_{R(2)}$	1	uA
Typical junction capacitance between terminal (Note 1)	$C_J$	40	pF
Maximum operating temperature range	$T_J$	-55 to +125	°C
Storage temperature range	$T_{STG}$	-55 to +125	°C

- Notes: 1. Measured at 1.0MHz and 0 reverse bias voltage.  
2. ESD sensitive product handling required.

## RATING AND CHARACTERISTIC CURVES (CDBT0230-HF)

Fig.1 - Forward Characteristics

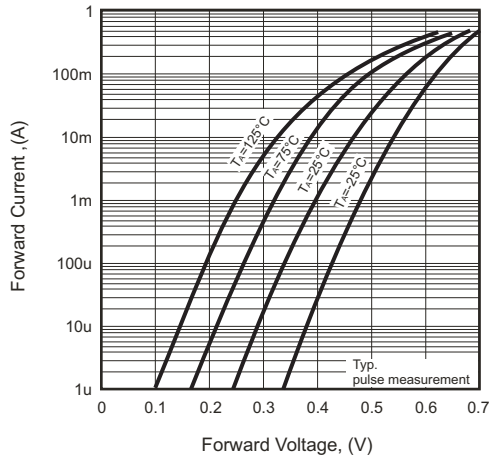


Fig.2 - Reverse Characteristics

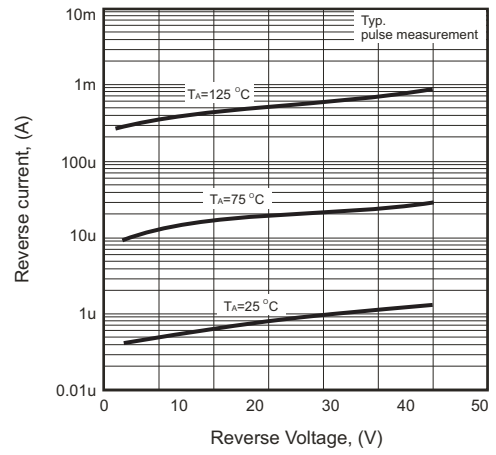


Fig.3 - Typical Junction Capacitance

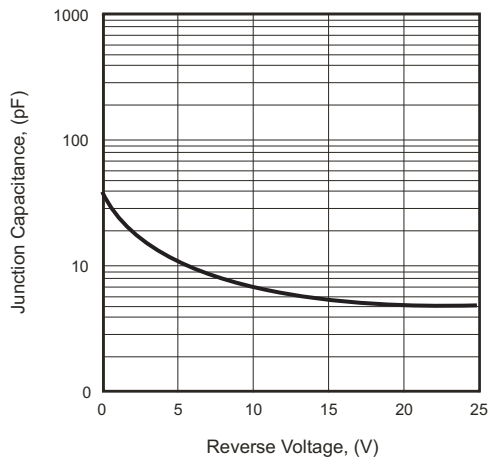
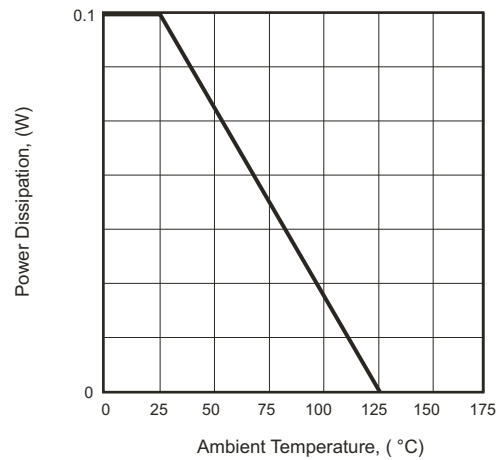
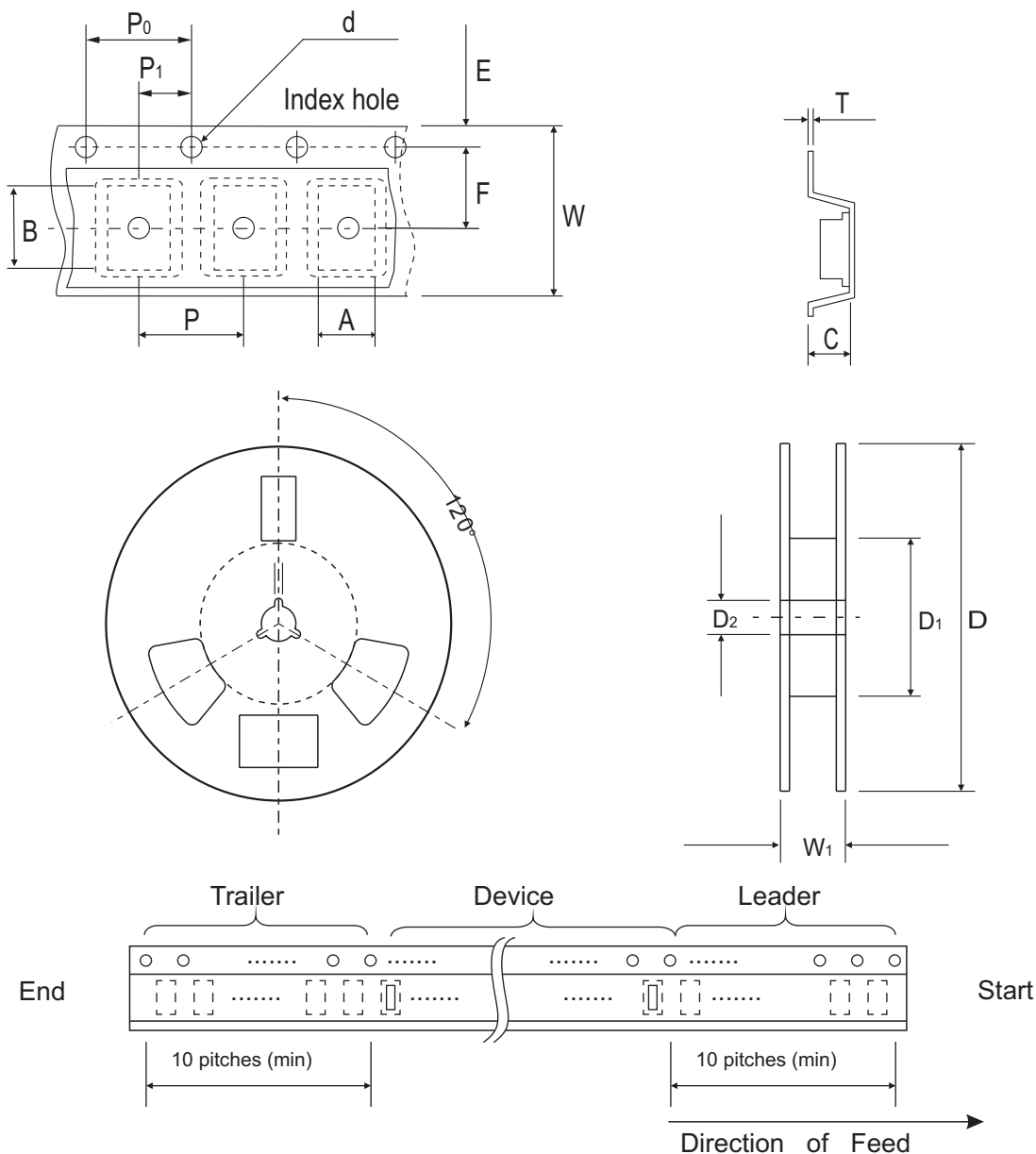


Fig.4 - Forward Power Dissipation Characteristics



## Reel Taping Specification

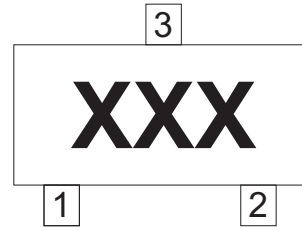


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.00 ± 0.20
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOT-23	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 ± 0.10	8.00 + 0.30 / - 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 ± 0.004	0.315 + 0.012 / - 0.004	0.374 ± 0.039

## Marking Code

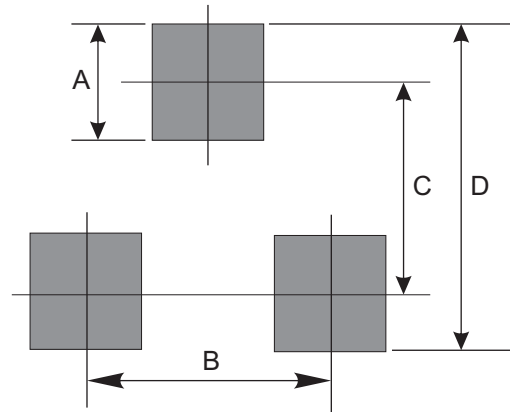
Part Number	Marking Code
CDBT0230-HF	05H



xxx = Product type marking code

## Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.80	0.031
B	1.90	0.075
C	2.02	0.080
D	2.82	0.111



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
SOT-23	3,000	7