

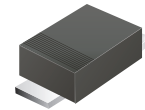
## CDBMHS240-HF

Reverse Voltage: 40 Volts

Forward Current: 2 Amp

RoHS Device

Halogen Free

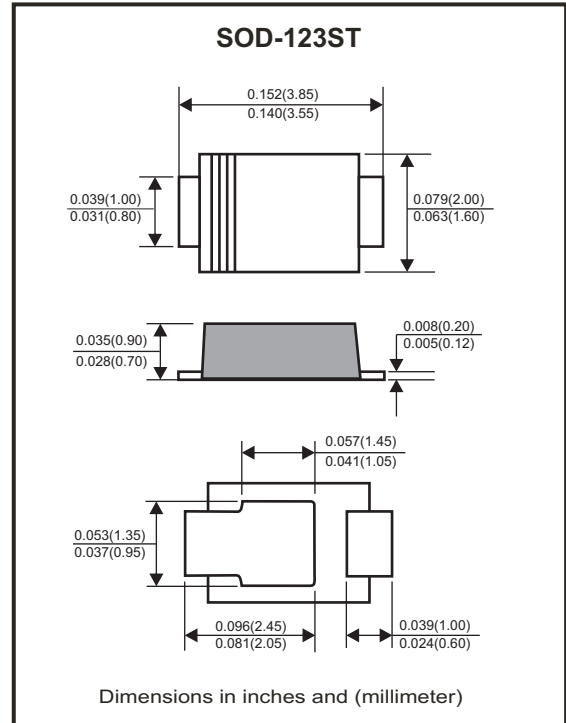


### Features

- Fast switching speed
- Surface mount package suited for automatic insertion
- Low power loss, high efficiency
- Low leakage current

### Mechanical data

- Epoxy: UL94V-0 rated flame retardant
- Case: SOD-123ST, Molded plastic
- Terminals: Solder plated solderable per MIL-STD-750 method 2026
- Mounting position: Any
- Polarity: Color band denotes cathode end
- Weight: 0.018 grams(approx.).



### Circuit diagram



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

Parameter	Symbol	Value	Unit
Max. Repetitive peak reverse voltage	$V_{RRM}$	40	V
Max. RMS voltage	$V_{RMS}$	28	V
Max. DC blocking voltage	$V_{DC}$	40	V
Max. Peak forward surge current (8.3ms single half sine-wave JEDEC method)	$I_{FSM}$	50	A
Max. Average forward current	$I_o$	2	A
Thermal resistance from junction to ambient	$R_{\theta JA}$	60	°C/W
Junction temperature range	$T_J$	-50 to +125	°C
Storage temperature range	$T_{STG}$	-50 to +125	°C

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F = 2A$	$V_F$			500	mV
Reverse leakage current	$V_R = 40V$	$I_R$		25	100	uA

Notes: Pulse test with  $P_w=300\mu\text{sec}$ , 1% duty cycle

## RATING AND CHARACTERISTIC CURVES (CDBMHS240-HF)

Fig.1 - Typical Forward Current Derating Curve

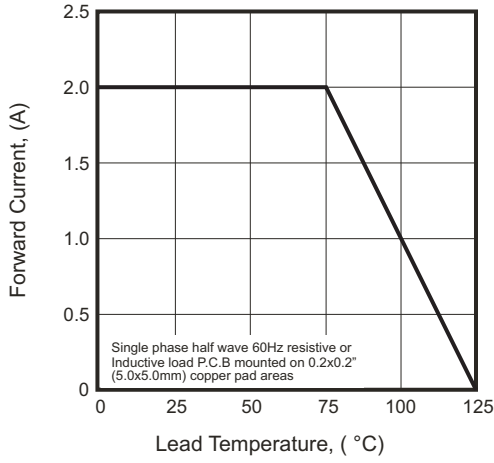


Fig.2 - Typical Forward Characteristics

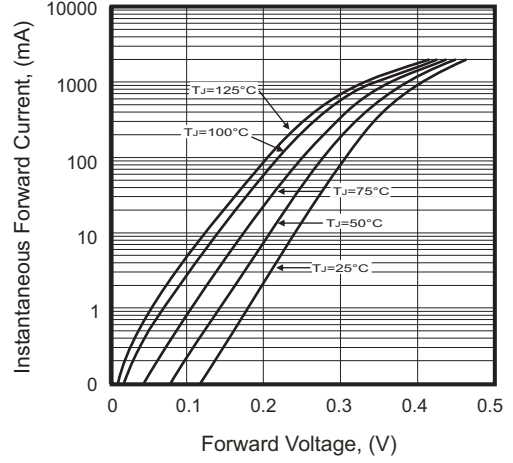
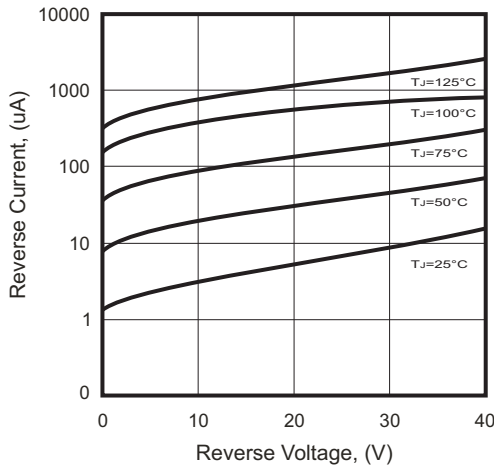
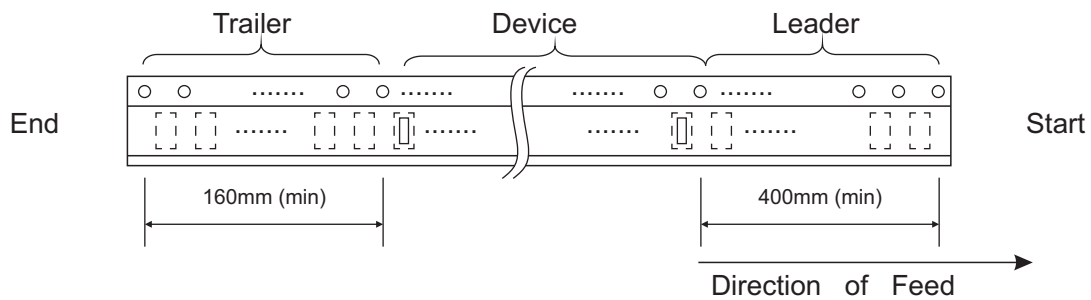
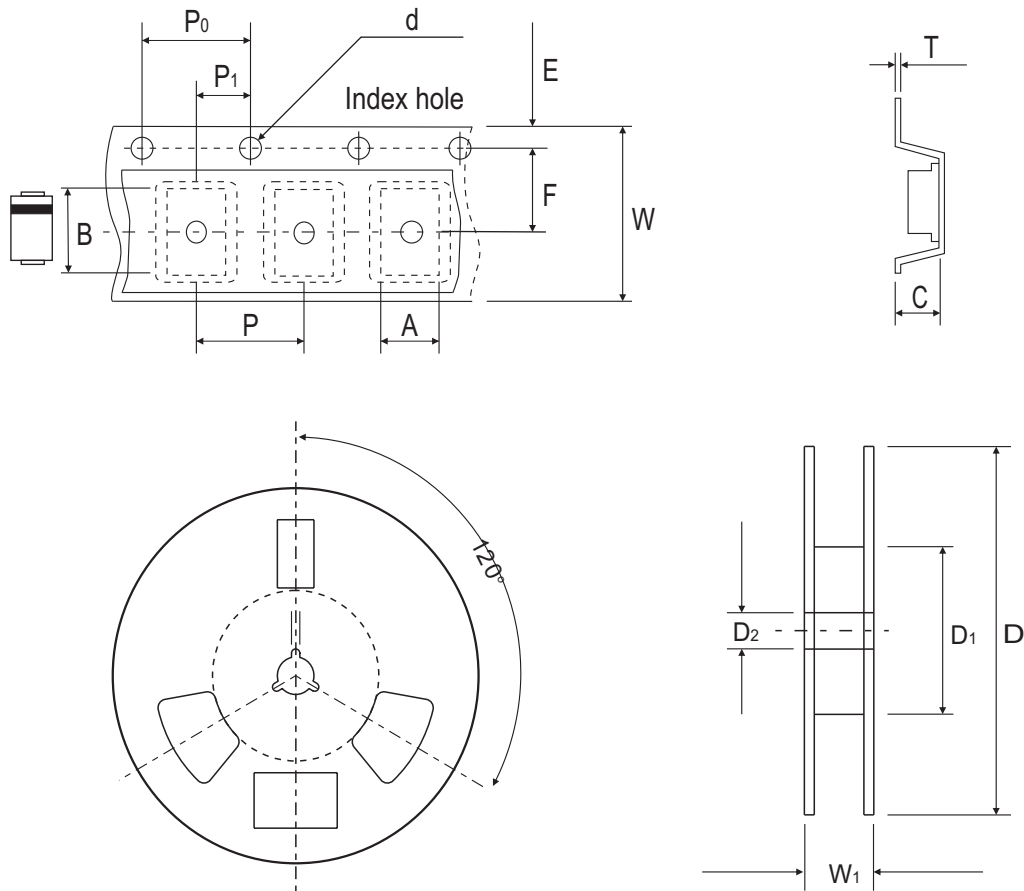


Fig.3 - Typical Reverse Characteristics



## Reel Taping Specification



SOD-123ST	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.00 ± 0.10	4.00 ± 0.10	1.10 ± 0.10	1.55 ± 0.10	178.00 MAX.	62.00 MIN.	13.00 ± 0.20
	(inch)	0.079 ± 0.04	0.157 ± 0.04	0.043 ± 0.04	0.061 ± 0.004	7.008 MAX.	2.441 MIN.	0.512 ± 0.008

SOD-123ST	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.23 ± 0.10	8.00 ± 0.30	11.40 MIN.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.004	0.315 ± 0.012	0.449 MIN.

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

## Marking Code

Part Number	Marking Code
CDBMHS240-HF	24

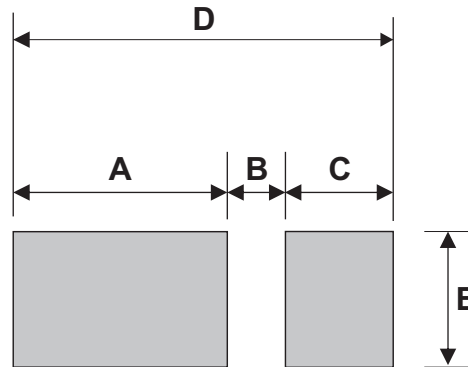


|||| = Cathod band

xx = Product type marking code

## Suggested PAD Layout

SIZE	SOD-123ST	
	(mm)	(inch)
A	2.30	0.091
B	0.55	0.022
C	1.25	0.049
D	4.10	0.161
E	1.40	0.055



## Standard Packaging

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