

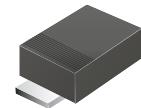
# CDBMTS140-HF Thru. CDBMTS1200-HF

**Reverse Voltage: 40 to 200 Volts**

**Forward Current: 1.0 Amp**

**RoHS Device**

**Halogen Free**

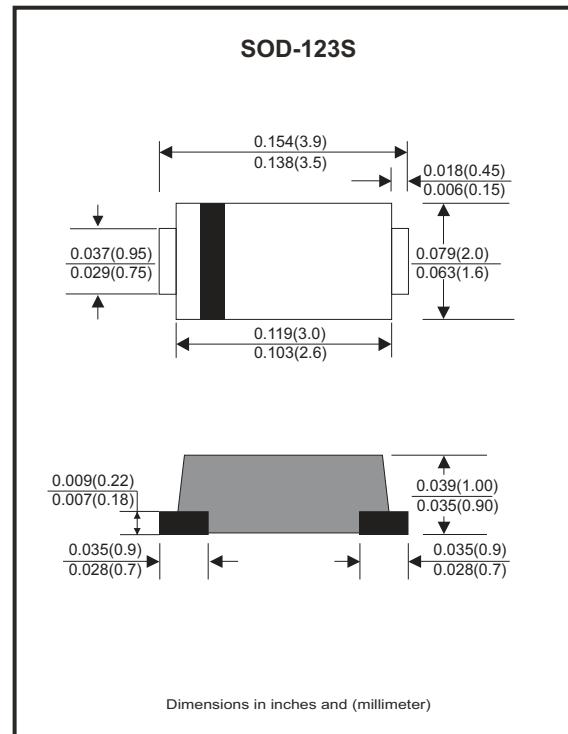


## Features

- Excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guarding for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free part meets environmental standards of MIL-STD-19500/228

## Mechanical data

- Epoxy: UL94V-0 rated flame retardant.
- Case: Molded plastic, SOD-123S/MINI SMA
- Terminals: Solderable per MIL-STD-750, Method 2026.
- Polarity: Indicated by cathode band.
- Mounting Position: any
- Weight: 0.0155 grams approx.



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

Parameter	Symbol	CDBMTS 140-HF	CDBMTS 160-HF	CDBMTS 1100-HF	CDBMTS 1150-HF	CDBMTS 1200-HF	Unit
Repetitive peak reverse voltage	$V_{RRM}$	40	60	100	150	200	V
Continuous reverse voltage	$V_R$	40	60	100	105	140	V
RMS voltage	$V_{RMS}$	28	42	70	150	200	V
Maximum Forward rectified current	$I_o$			1.0			A
Maximum forward voltage @ $I_F=1.0A$	$V_F$	0.50	0.70	0.85	0.90	0.92	V
Maximum forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC methode)	$I_{FSM}$			30			A
Maximum reverse Current ( $V_R=V_{RRM}$ )	$I_R$  $T_J=25^\circ\text{C}$			0.5			mA
	$T_J=100^\circ\text{C}$			10			
Typical diode Junction capacitance ( $f=1\text{MHz}$ and applied 4V DC reverse voltage)	$C_J$			120			pF
Operating temperature	$T_J$	-55 to +125		-55 to +150			°C
Storage temperature range	$T_{STG}$			-65 to +175			°C

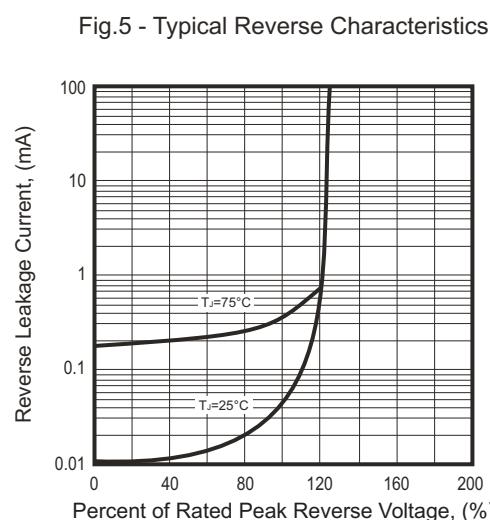
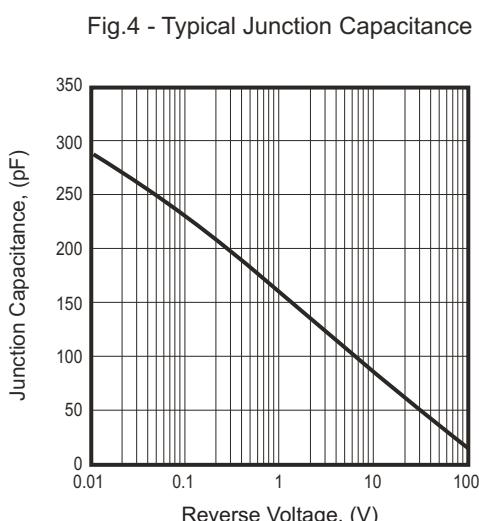
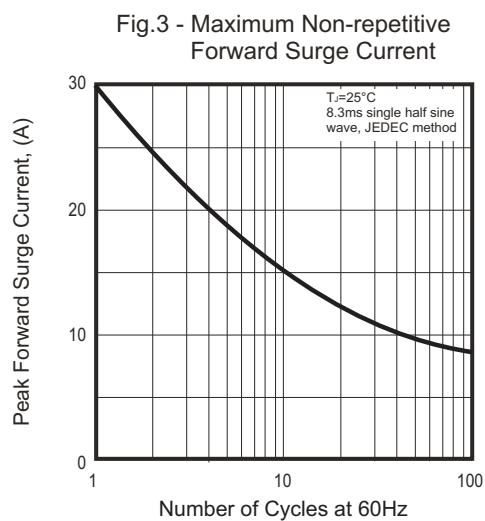
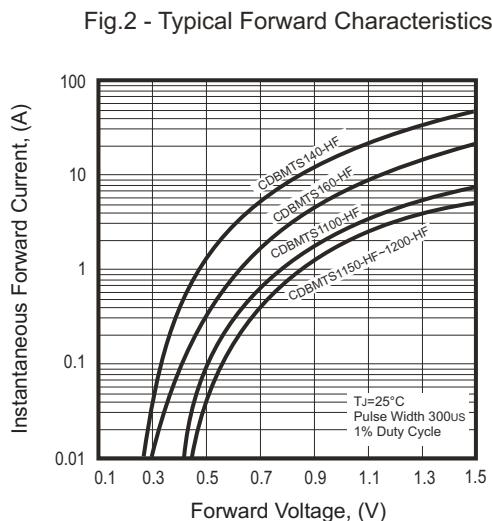
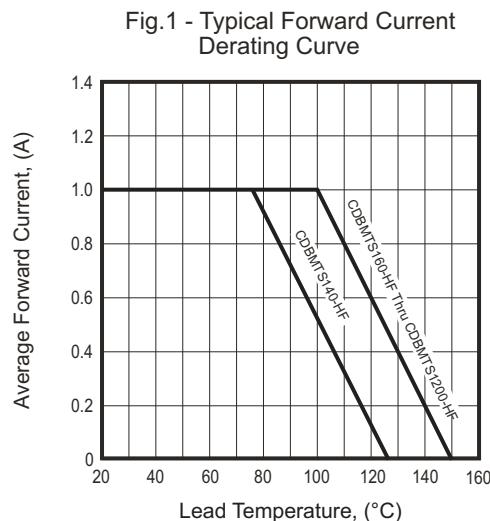
Company reserves the right to improve product design , functions and reliability without notice.

REV: B

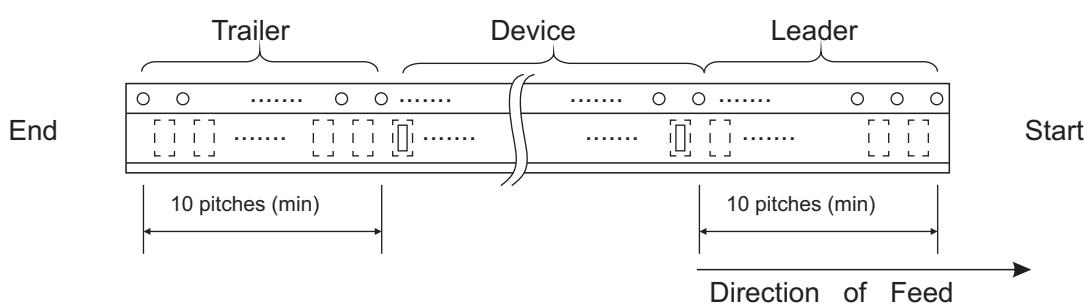
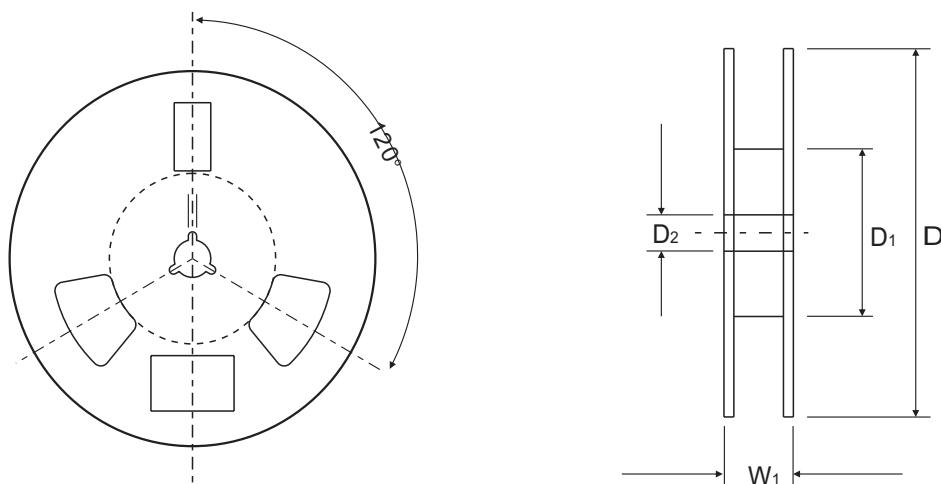
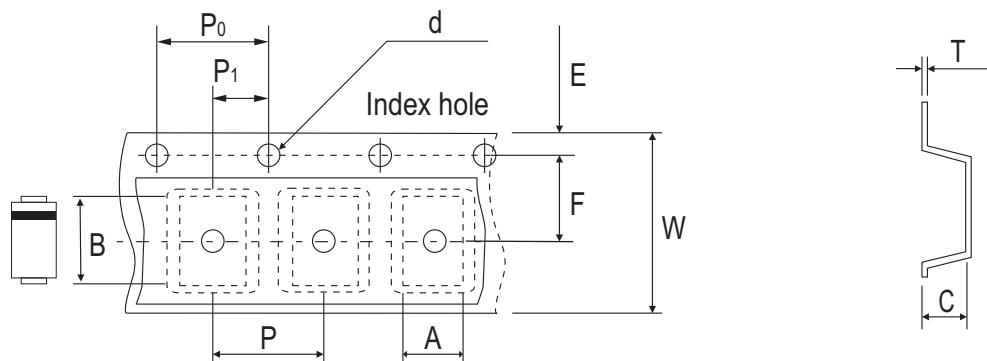
# Low Profile SMD Schottky Barrier Rectifiers

**Comchip**  
SMD Diode Specialist

## Rating and Characteristic Curves (CDBMTS140-HF Thru. CDBMTS1200-HF)



## Reel Taping Specification



	SYMBOL	A	B	C	d	D	D1	D2
SOD-123S	(mm)	$2.00 \pm 0.10$	$3.85 \pm 0.10$	$1.10 \pm 0.10$	$1.50 \pm 0.10$	$178 \pm 2.00$	62.0 MIN.	$13.0 \pm 0.50$
	(inch)	$0.079 \pm 0.004$	$0.152 \pm 0.004$	$0.043 \pm 0.004$	$0.059 \pm 0.004$	$7.00 \pm 0.079$	2.440 MIN.	$0.512 \pm 0.020$

	SYMBOL	E	F	P	P0	P1	T	W	W1
SOD-123S	(mm)	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$0.23 \pm 0.10$	$8.00 \pm 0.30$	$11.40 \pm 1.0$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.009 \pm 0.004$	$0.315 \pm 0.012$	$0.449 \pm 0.039$

# Low Profile SMD Schottky Barrier Rectifiers

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## Pinning information

Pin	Simplified outline	Symbol
PIN 1 Cathode PIN 2 Anode		

## Marking Code

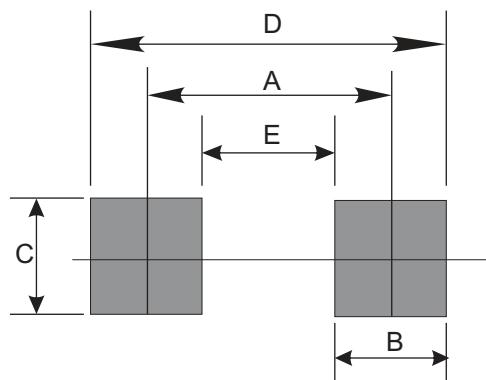
Part Number	Marking Code
CDBMTS140-HF	14
CDBMTS160-HF	16
CDBMTS1100-HF	10
CDBMTS1150-HF	115
CDBMTS1200-HF	120



xx / xxx = Product type marking code

## Suggested PAD Layout

SIZE	SOD-123S	
	(mm)	(inch)
A	3.00	0.118
B	1.00	0.039
C	1.10	0.043
D	4.00	0.157
E	2.00	0.079



## Standard Packaging

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