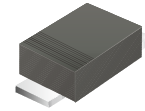


CDBMHS320-HF Thru. CDBMHS3100-HF

Reverse Voltage: 20~100 Volts

Forward Current: 3 Amp

RoHS Device
Halogen Free

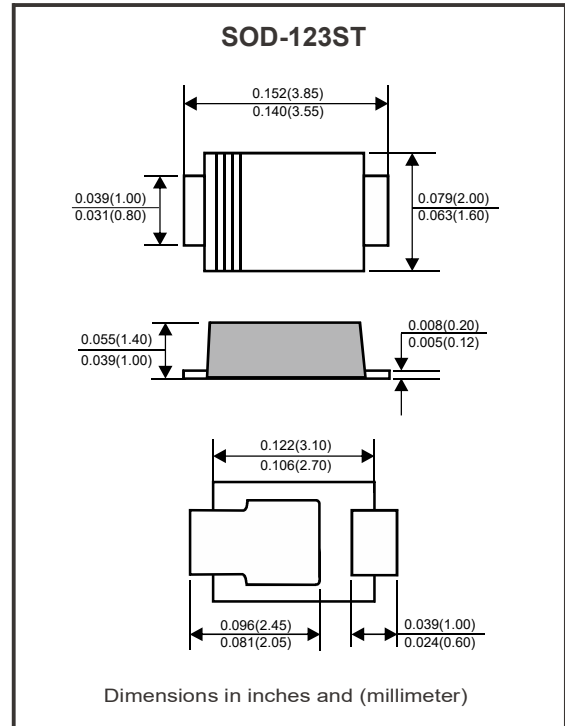


Features

- Surface mount package suited for automatic insertion
- Low power loss, high efficiency
- High surge capacity
- Lead-free & halogen-free parts, RoHS compliant.

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



Circuit diagram



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

Parameter	Symbol	CDBMHS 320-HF	CDBMHS 330-HF	CDBMHS 340-HF	CDBMHS 360-HF	CDBMHS 3100-HF	Unit	
Max. Peak reverse voltage	V_{RRM}	20	30	40	60	100	V	
Max. DC blocking voltage	V_{DC}	20	30	40	60	100		
Max. RMS voltage	V_{RMS}	14	21	28	42	70		
Max. Average forward current	$I_{F(AV)}$	3						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80						A
Max. Forward voltage at 3.0A (Note1)	V_F	0.52		0.65		0.8	V	
Max. DC reverse current $T_J=25^\circ\text{C}$	I_R	160		100		20	μA	
Typ. Thermal resistance (Note2)	Junction to ambient	$R_{\theta JA}$					105	$^\circ\text{C/W}$
	Junction to lead	$R_{\theta JL}$						
Operating junction temperature range	T_J	-55 to +125			-55 to +150		$^\circ\text{C}$	
Storage temperature range	T_{STG}	-55 to +125			-55 to +150			

Notes: 1. Pulse test with $PW=300\mu\text{sec}$, 1% duty cycle.
2. Mounted on 50cm^2 FR-4 PCB board.

RATING AND CHARACTERISTIC CURVES (CDBMHS3XXX-HF Series)

Fig.1 - Typical Forward Current Derating Curve

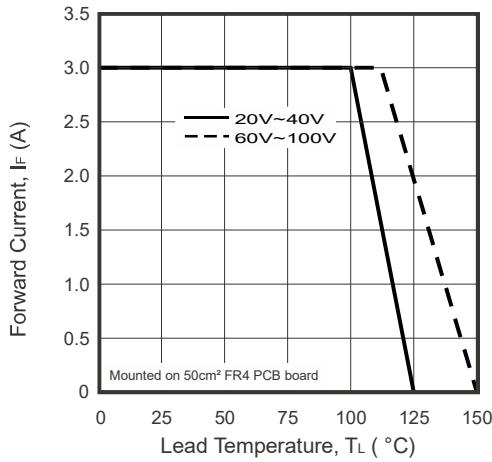


Fig.2 - Typical Reverse Characteristics

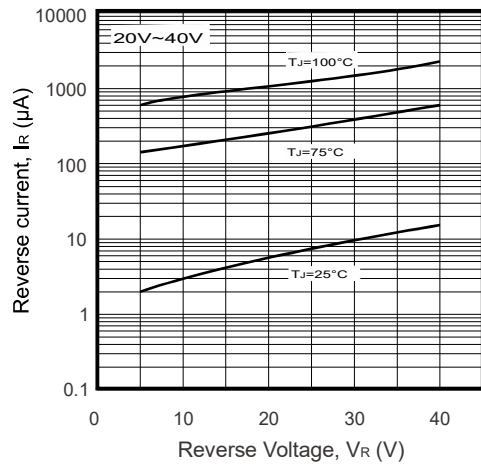


Fig.3 - Typical Reverse Characteristics

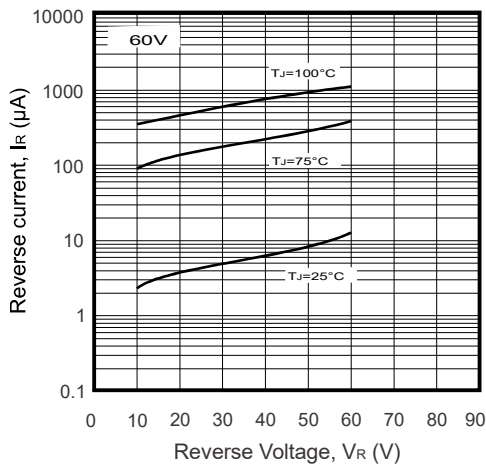


Fig.4 - Typical Reverse Characteristics

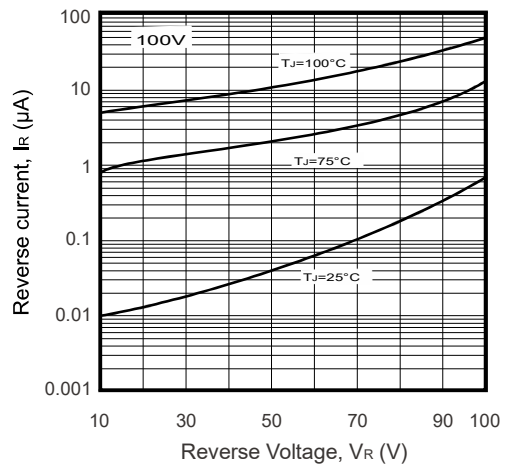


Fig.5 - Typical Junction Capacitance

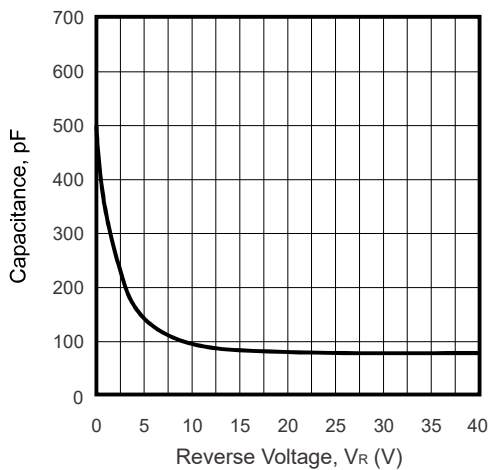
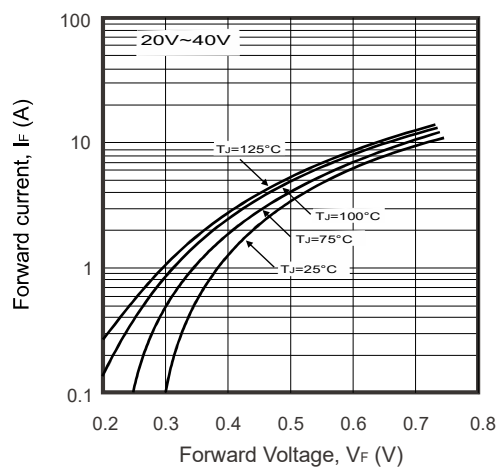


Fig.6 - Typical Instantaneous Forward Characteristics



RATING AND CHARACTERISTIC CURVES (CDBMHS3XXX-HF Series)

Fig.7 - Typical Instantaneous Forward Characteristics

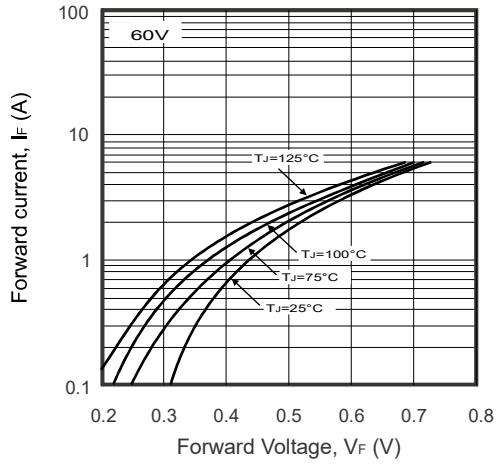
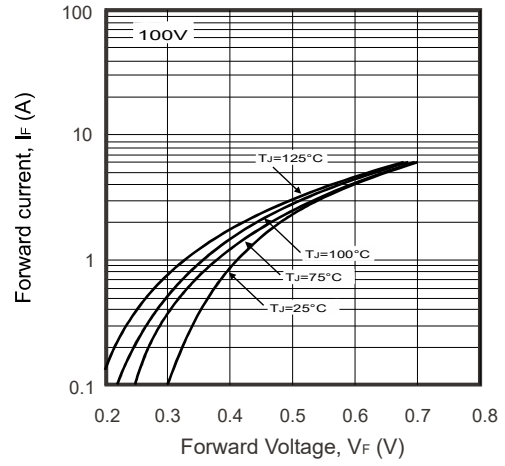
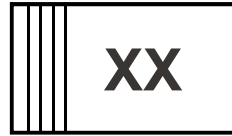


Fig.8 - Typical Instantaneous Forward Characteristics



Marking Code

Part Number	Marking Code
CDBMHS320-HF	EA
CDBMHS330-HF	EB
CDBMHS340-HF	EC
CDBMHS360-HF	ED
CDBMHS3100-HF	EF

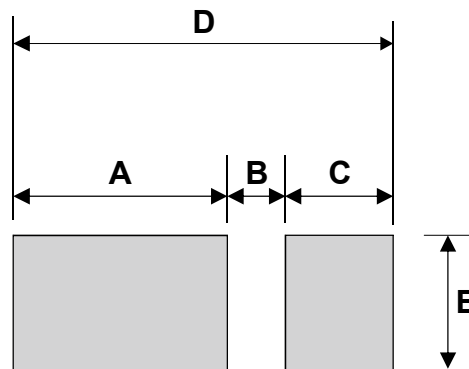


|||| = Cathod band

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