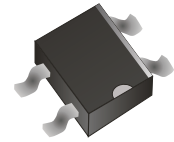


## CDBHD140L-G Thru. CDBHD1100L-G

Reverse Voltage: 40 to 100 Volts

Forward Current: 1.0 Amp

RoHS Device

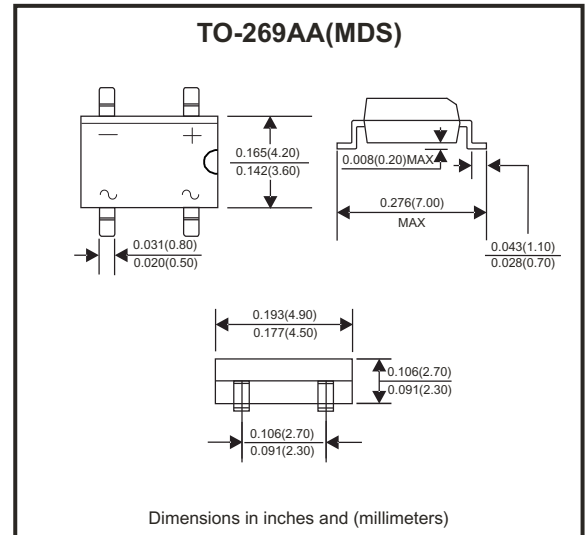


### Features

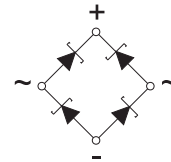
- Schottky barrier chips in TO-269AA bridge.
- Metal semiconductor junction with guard ring.
- Silicon epitaxial planar chips.
- Very low forward drop down voltage.
- For use in low voltage, high efficiency inverters, free wheeling, and polarity protection applications.

### Mechanical data

- Case: Molded plastic, TO-269AA(MDS)
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Marked on body
- Mounting Position: Any
- Weight: 0.13 grams(approx.).



### Circuit diagram



### Maximum Ratings and Electrical Characteristics

Parameter	Conditions	Symbol	CDBHD 140L-G	CDBHD 160L-G	CDBHD 1100L-G	Unit
Repetitive peak reverse voltage		$V_{RRM}$	40	60	100	V
Continuous reverse voltage		$V_R$	40	60	100	V
RMS voltage		$V_{RMS}$	28	42	70	V
Peak forward surge current	8.3ms single half sine-wave (JEDEC method)	$I_{FSM}$	30			A
Average forward rectified current	0.2x0.2"(5.0x5.0mm) copper pad, See fig.1	$I_{AV}$	1			A
Forward voltage	Per element at 1.0A peak	$V_F$	0.44	0.625	0.75	V
Reverse current	$V_R=V_{RRM}, T_J=25^{\circ}C$	$I_R$	0.5			mA
	$V_R=V_{RRM}, T_J=100^{\circ}C$	$I_R$	20			
Typ. thermal resistance	Junction to ambient	$R_{\theta JA}$	85			$^{\circ}C/W$
	Junction to lead	$R_{\theta JL}$	20			
Typ. Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage.	$C_J$	250			pF
Operating junction temperature Range		$T_J$	-55 to +125	-55 to +150		$^{\circ}C$
Storage temperature Range		$T_{STG}$	-65 to +175			$^{\circ}C$

## RATING AND CHARACTERISTIC CURVES (CDBHD140L-G thru CDBHD1100L-G)

Fig.1 - Forward Current Derating Curve

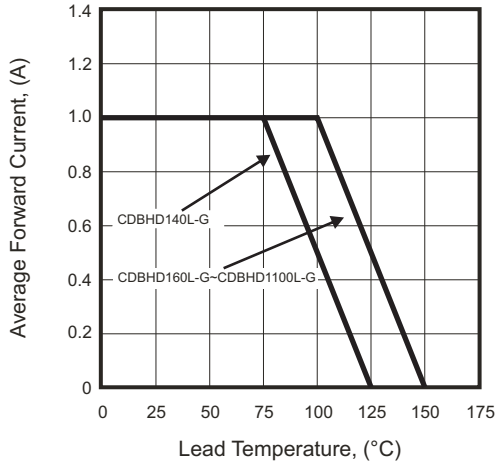


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

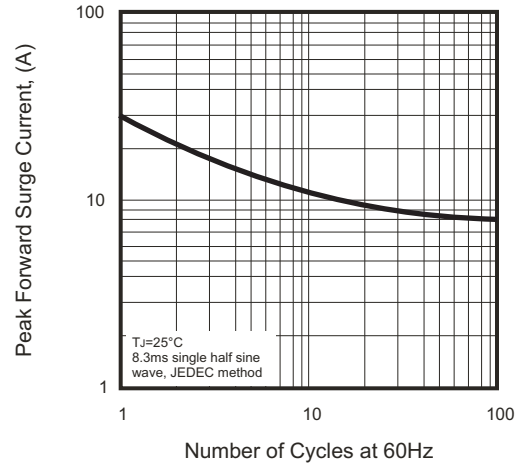


Fig.3 - Typical Instantaneous Forward Characteristics

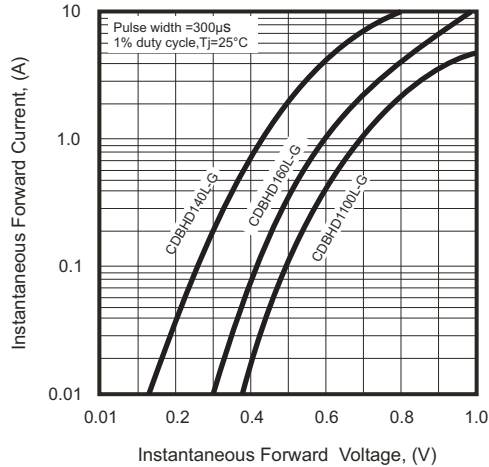


Fig.4A - Typical Reverse Characteristics

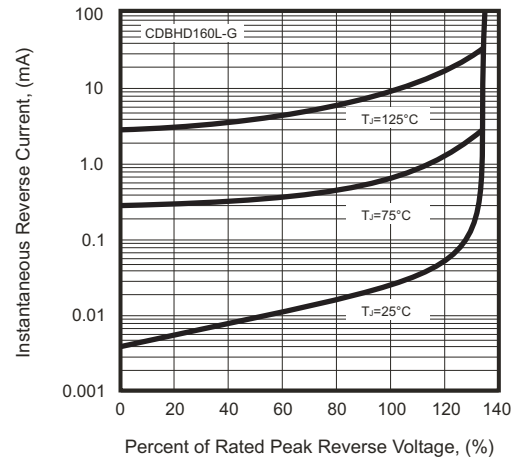


Fig.5 - Typical Junction Capacitance

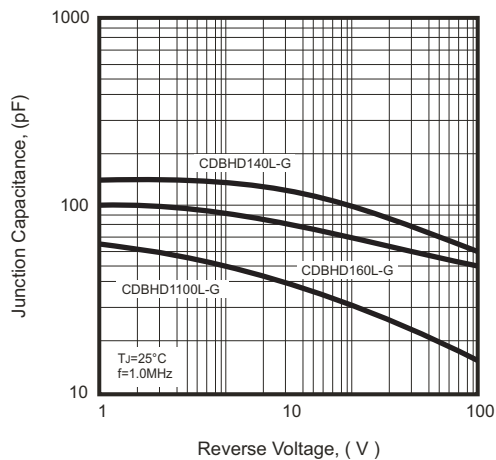
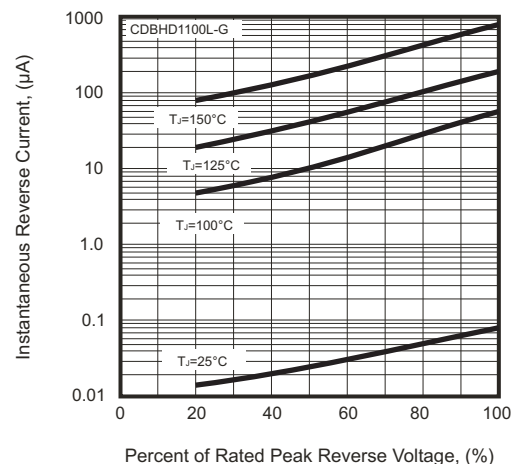
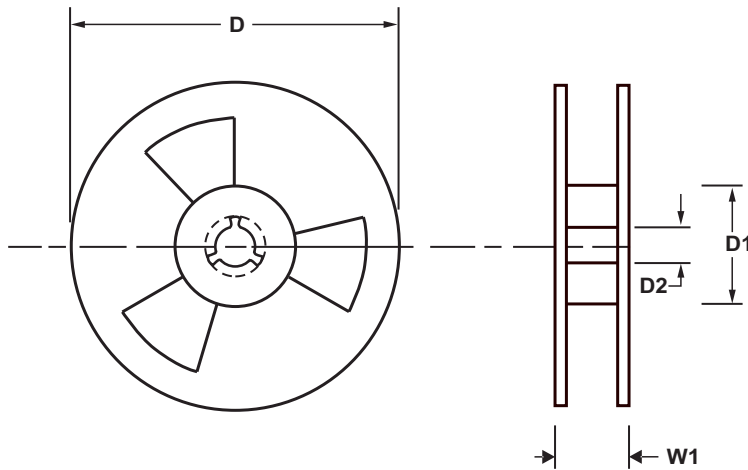
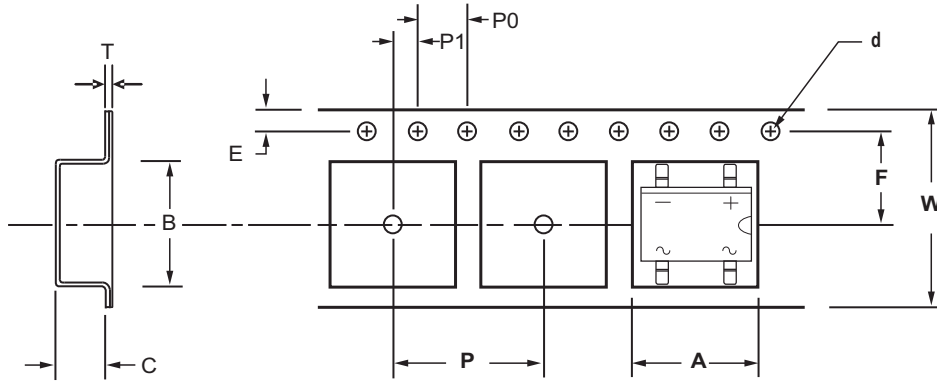


Fig.4B- Typical Reverse Characteristics



## Reel Taping Specification

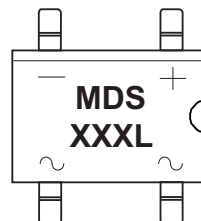


TO-269AA(MDS)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$5.00 \pm 0.10$	$7.24 \pm 0.10$	$3.33 \pm 0.10$	$1.50 \pm 0.10$	$330 \pm 2.00$	50 MIN.	$13.00 \pm 0.50$
	(inch)	$0.197 \pm 0.004$	$0.285 \pm 0.004$	$0.131 \pm 0.004$	$0.059 \pm 0.004$	$12.992 \pm 0.079$	1.969 MIN.	$0.512 \pm 0.020$

TO-269AA(MDS)	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	$1.75 \pm 0.10$	$5.50 \pm 0.10$	$8.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$12.00 \pm 0.30$	$18.00 \pm 1.00$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.315 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.472 \pm 0.012$	$0.709 \pm 0.039$

## Marking Code

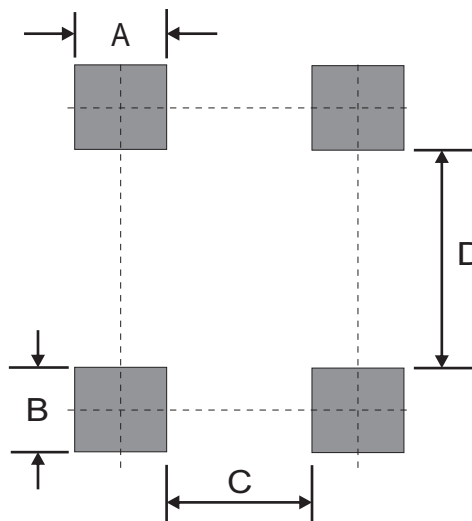
Part Number	Marking Code
CDBHD140L-G	MDS14L
CDBHD160L-G	MDS16L
CDBHD1100L-G	MDS110L



XXL / XXXL = Product type marking code

## Suggested PAD Layout

SIZE	TO-269AA(MDS)	
	(mm)	(inch)
A	0.58	0.023
B	0.76	0.030
C	1.78	0.070
D	5.75	0.226



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
TO-269AA(MDS)	2,500	13