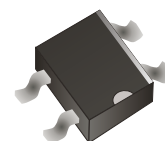


CDBHD140L-G Thru. CDBHD1100L-G

Reverse Voltage: 40 to 100V

Forward Current: 1.0A

RoHS Device

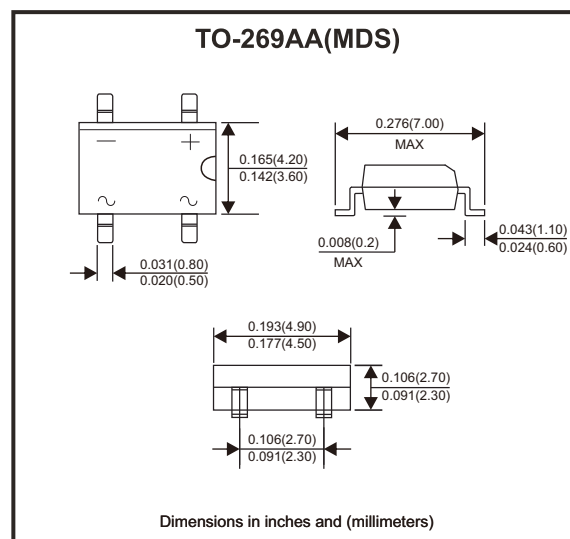


Features

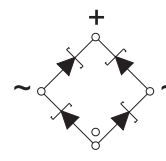
- Schottky barrier chips in TO-269AA bridge.
- Metal semiconductor junction with guard ring.
- Silicon epitaxial planar chips.
- Very low forward drop down voltage.
- For use in low voltage, high efficiency inverters, free wheeling, and polarity protection applications.

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.



Circuit Diagram



Maximum Ratings and Electrical Characteristics (at TA=25°C unless otherwise noted)

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 methode)	I _{FSM}	30			A
Average forward rectified current	0.2x0.2"(5.0x5.0mm) copper pad, see Fig.1	I _{F(AV)}	1			A
Forward voltage	Per element at 1A peak	V _F	0.44	0.625	0.75	V
Reverse current	V _R = V _{RRM} , T _J = 25°C	I _R	0.5			mA
	V _R = V _{RRM} , T _J = 100°C	I _R	20			
Typ. thermal resistance	Junction to ambient	R _{θJA}	75			°C/W
	Junction to lead	R _{θJL}	15			
Typ. diode junction capacitance	f = 1MHz and applied 4V DC reverse voltage	C _J	250			pF
Operating temperature range		T _J	-55 to +125	-55 to +150		°C
Storage temperature range		T _{STG}	-65 to +175			°C

Rating and Characteristic Curves (CDBHD140L-G Thru. CDBHD1100L-G)

Fig.1 - Forward Current Derating Curve

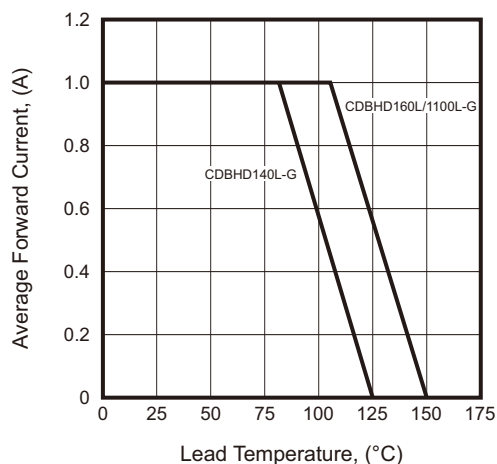


Fig.2 - Max. Non-Repetitive Peak Forward Surge Current

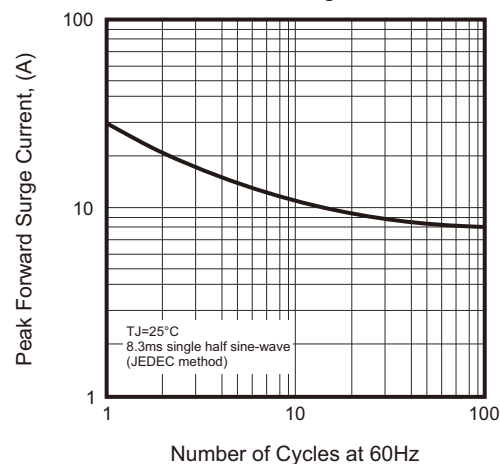


Fig.3 - Typical Instantaneous Forward Characteristics

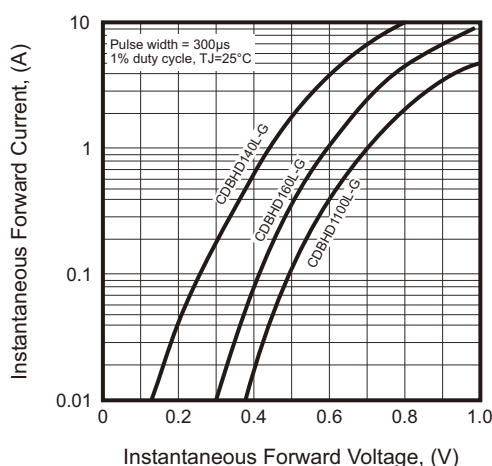


Fig.4A - Typical Reverse Characteristics

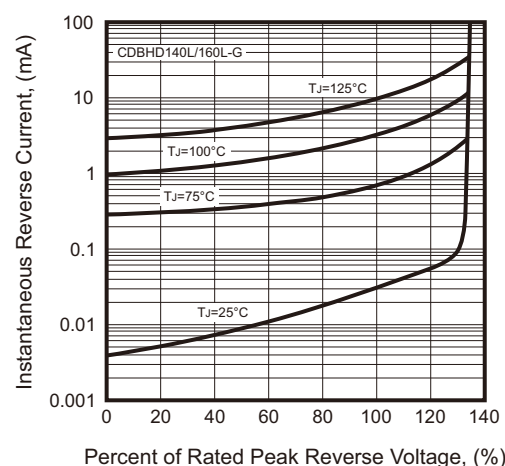


Fig.5 - Typical Junction Capacitance

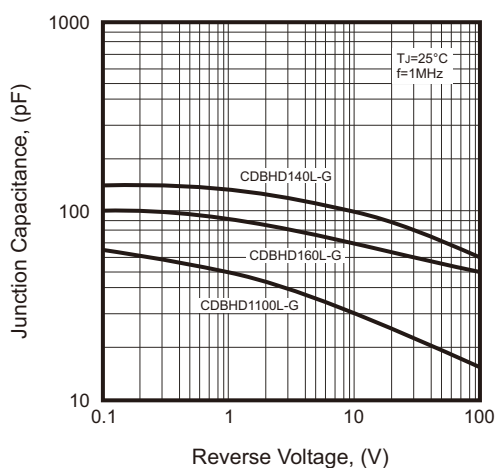
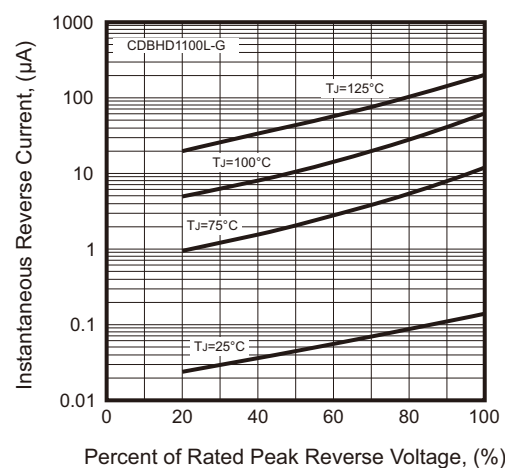
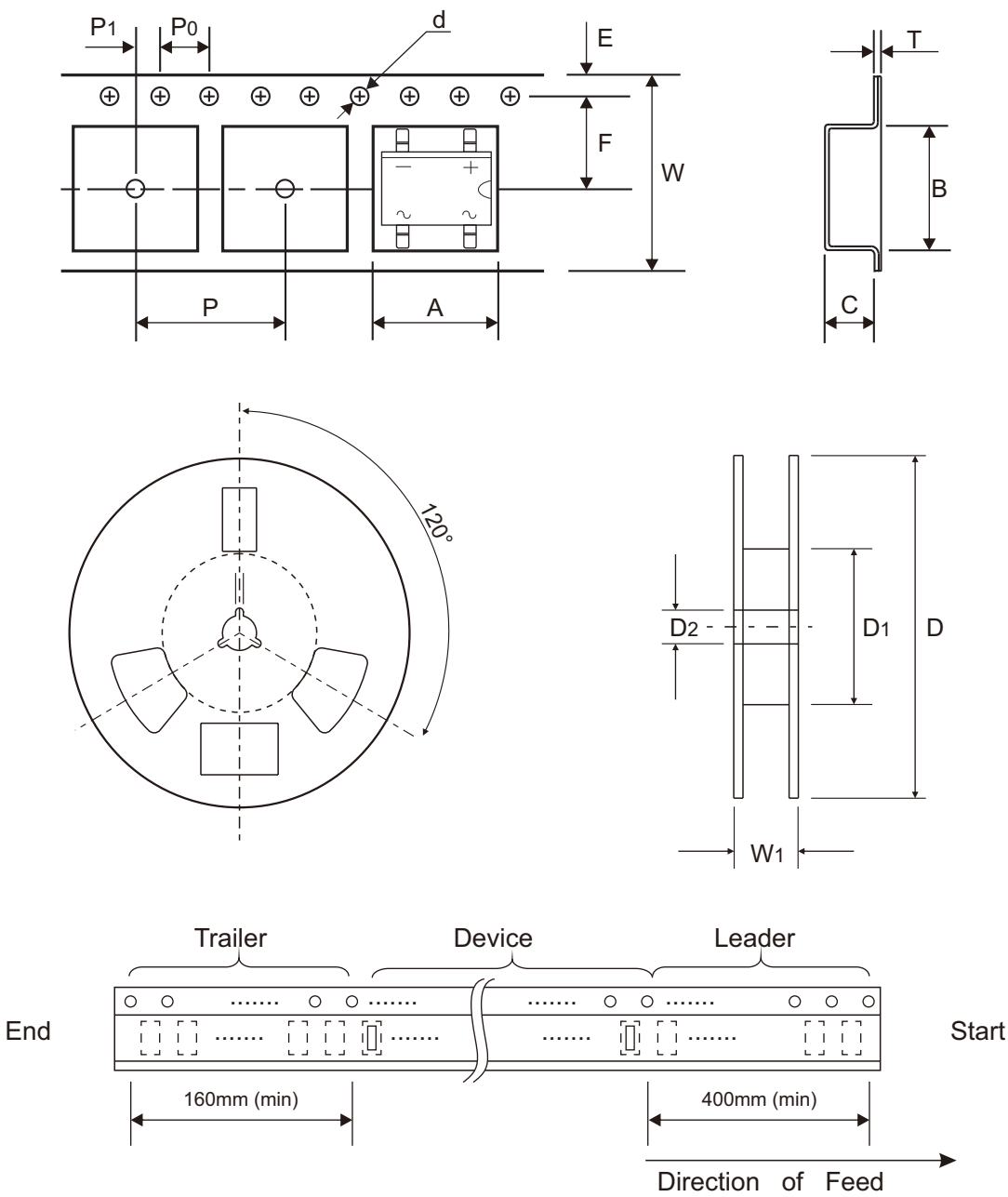


Fig.4B - Typical Reverse Characteristics



Reel Taping Specification

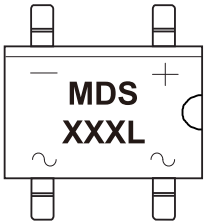


TO-269AA (MDS)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	5.00 ± 0.10	7.24 ± 0.10	3.33 ± 0.10	1.50 ± 0.10	330 ± 2.00	50 Min.	13.00 ± 0.50
	(inch)	0.197 ± 0.004	0.285 ± 0.004	0.131 ± 0.004	0.059 ± 0.004	12.992 ± 0.079	1.969 Min.	0.512 ± 0.020

TO-269AA (MDS)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.30 ± 0.10	12.00 ± 0.30	18.00 ± 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.012 ± 0.004	0.472 ± 0.012	0.709 ± 0.039

Marking Code

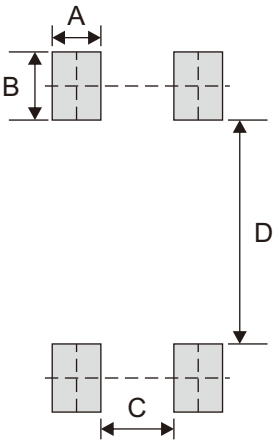
Part Number	Marking Code
CDBHD140L-G	MDS14L
CDBHD160L-G	MDS16L
CDBHD1100L-G	MDS110L



XXL / XXXL = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	TO-269AA(MDS)	
	(mm)	(inch)
A	1.00	0.039
B	1.40	0.055
C	1.50	0.059
D	4.60	0.181



Standard Packaging

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