Low V_F SMD Schottky Bridge Rectifiers

CDBHD220-G Thru. CDBHD2100-G

Reverse Voltage: 20 to 100 Volts
Forward Current: 2.0 Amp
RoHS Device

Features

-Schottky barrier chips in TO-269AA bridge.

-Metal semiconductor junction with guard ring.

-Silicon epitaxial planar chips.

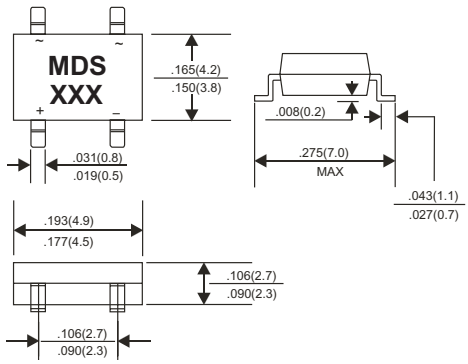
-Very low forward drop down voltage.

-For use in low voltage, high efficiency inverters, free wheeling, and polarity protection applications.

-Lead-free parts meet RoHS requirments.

-UL recognized file # E321971

TO-269AA



Dimensions in inches and (millimeters)

Mechanical data

-Case: TO-269AA, molded plastic.

-Terminals: solderable per MIL-STD-750, method 2026.

-Polarity: Marked on body.

-Mounting Position: Any.

-Weight:0.22 gram(approx.).

Maximum Ratings and Electrical Characteristics

Parameter	Conditions	Symbol	CDBHD 220-G	CDBHD 240-G	CDBHD 260-G	CDBHD 280-G	CDBHD 2100-G	Units
Max. repetitive peak reverse voltage		V_{RRM}	20	40	60	80	100	V
Max. DC blocking voltage		V_{RMS}	14	28	42	56	70	V
Max. RMS voltage		V_R	20	40	60	80	100	V
Max. Instantaneous forward voltage at 2.0A		V_F	0.5		0.70	0.85		V
Average Forward rectified current	2.0X2.0"(5.0x5.0mm) copper pad, See fig.1	I_{AV}	2.0					A
Peak Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}	50					A
Reverse current	$V_R=V_{RRM}$ T_A=25°C	I_R	0.5					mA
	$V_R=V_{RRM}$ T_A=100°C		20					
Thermal resistance	Junction to ambient	$R_{\theta JA}$	85					°C/W
	Junction to lead	$R_{\theta JL}$	20					
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J	150					pF
Operating junction temperature		T_J	-55 to +125			-55 to +150		°C
Sorage temperature		T_{STG}	-65 to +175					°C

RATING AND CHARACTERISTIC CURVES (CDBHD220-G Thru. CDBHD2100-G)

Fig.1 - Forward Current Derating Curve

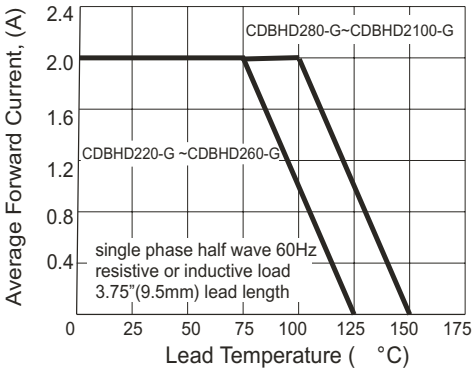


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

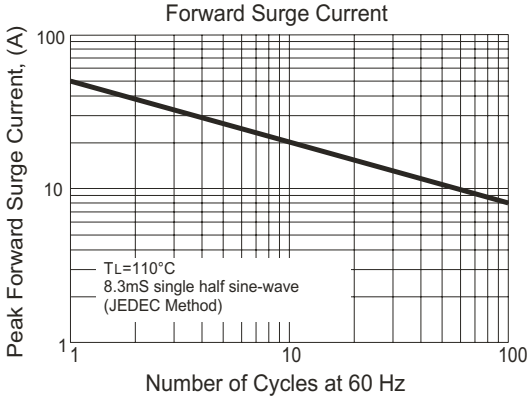


Fig. 3 - Typical Instantaneour Forward Characteristics

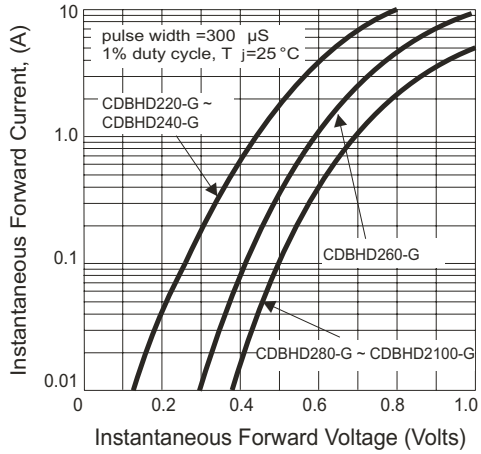


Fig. 4A - Typical Reverse Characteristics

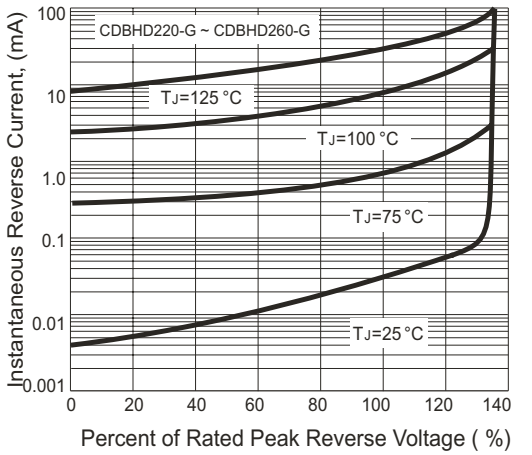


Fig. 5 - Typical Junction Capacitance

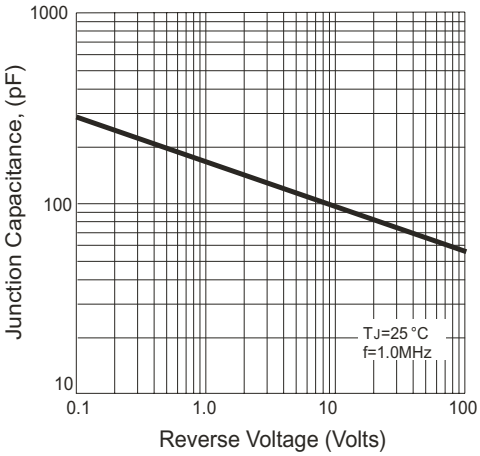
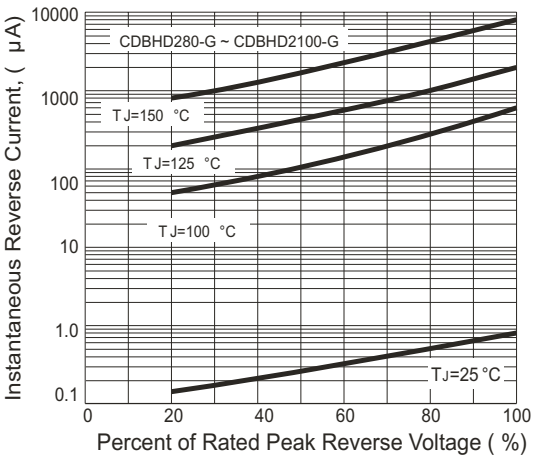
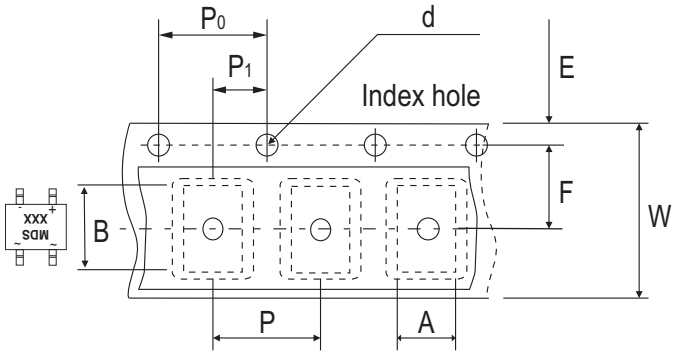
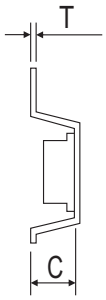


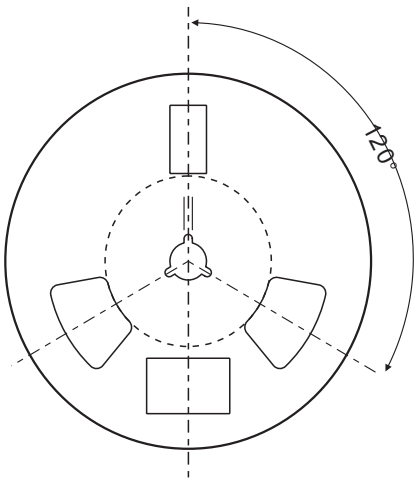
Fig. 4B - Typical Reverse Characteristics

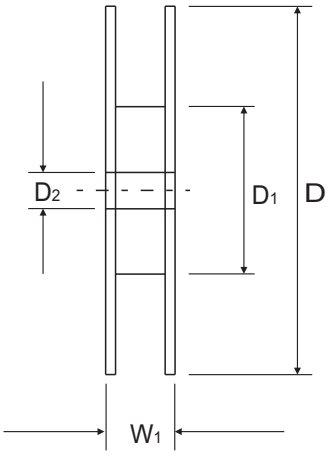


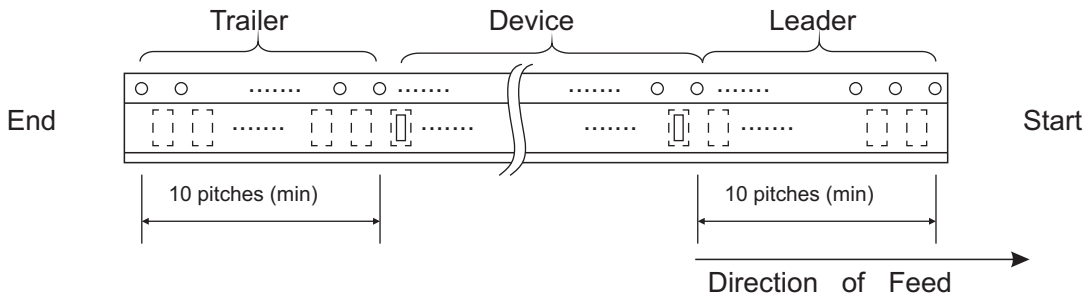
Reel Taping Specification









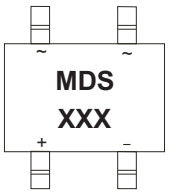


	SYMBOL	A	B	C	d	D	D1	D2
TO-269AA	(mm)	5.00 ± 0.10	3.20 ± 0.10	2.90 ± 0.10	1.55 ± 0.10	330 ± 1.00	50.0 MIN.	13.0 ± 0.20
	(inch)	0.197 ± 0.004	0.126 ± 0.004	0.114 ± 0.004	0.0610 ± 0.004	12.992 ± 0.039	1.969 MIN.	0.512 ± 0.008

	SYMBOL	E	F	P	P0	P1	W	W1
TO-269AA	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.00 ± 0.20	18.40 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.008	0.724 MAX.

Marking Code

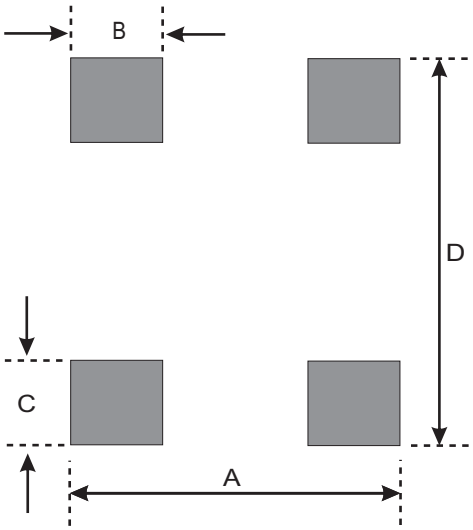
Part Number	Marking Code
CDBHD220-G	MDS22
CDBHD240-G	MDS24
CDBHD260-G	MDS26
CDBHD280-G	MDS28
CDBHD2100-G	MDS210



xxx = Product type marking code

Suggested PAD Layout

SIZE	TO-269AA	
	(mm)	(inch)
A	2.67	0.105
B	0.58	0.023
C	0.76	0.030
D	6.91	0.272



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
TO-269AA	3,000	13