SMD Schottky Barrier Rectifier
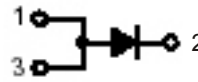
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CDBD835L

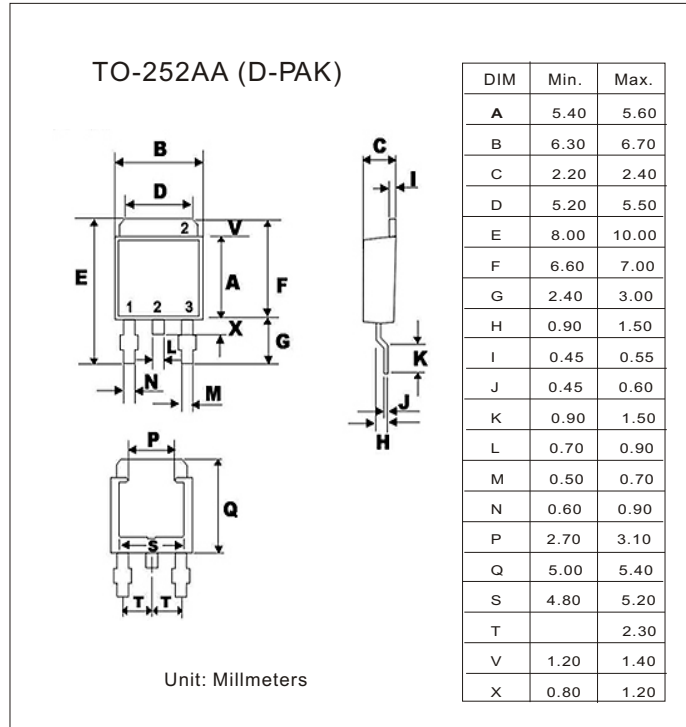**Reverse Voltage: 35 Volts**
Forward Current: 8.0 Amp

Features

- Lead formed for surface mount
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Low Switching Noise
- Low forward voltage drop

Mechanical data

- Case: TO-252AA molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Mounting position: Any
- Approx. Weight: 0.295 gram

TO-252AA (D-PAK)

DIM	Min.	Max.
A	5.40	5.60
B	6.30	6.70
C	2.20	2.40
D	5.20	5.50
E	8.00	10.00
F	6.60	7.00
G	2.40	3.00
H	0.90	1.50
I	0.45	0.55
J	0.45	0.60
K	0.90	1.50
L	0.70	0.90
M	0.50	0.70
N	0.60	0.90
P	2.70	3.10
Q	5.00	5.40
S	4.80	5.20
T		2.30
V	1.20	1.40
X	0.80	1.20

Unit: Millimeters

Maximum Ratings and Electrical Characterics

Parameter	Symbol	CDBD835	Unit
Max. Repetitive Peak Reverse Voltage	V_{RRM}	35	V
Max. DC Blocking Voltage	V_{DC}	35	V
Max. RMS Voltage	V_{RMS}	24.5	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	75	A
Average Rectifier Forward Current (Note 1)	$I_{F(AV)}$	8.0	A
Peak Repetitive Foward Current (at Rated V_R, Square Wave, 20KHz, Tc=80°C)	I_{FRM}	16	A
Max. Instantaneous Forward Current at 8.0 A (Note 2)	V_F	0.5	V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25 °C Ta=100°C	I_R	1.4 35	mA
Max. Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	80 6.0	°C/W
Operating Junction temperature	T_j	-65 to +125	°C
Storage Temperature	T_{STG}	-65 to +150	°C

Note 1. Total device Rated Vp at Tc=100°C
2. Pulse width = 300uS, duty cycle less than 2%.
3. Thermal resistance from junction to ambient and junction to case mounted on minimum pad size recommended

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Rating and Characteristic Curves (CDBD835L)
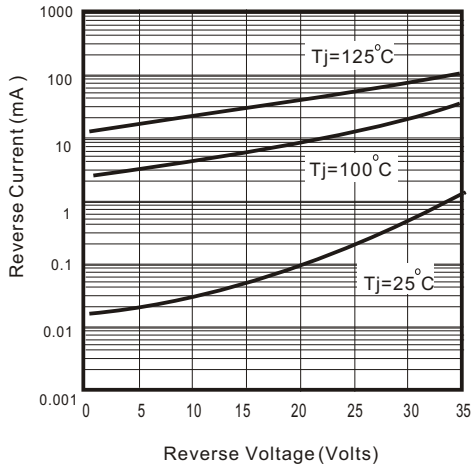
Fig.1 - Reverse Characteristics
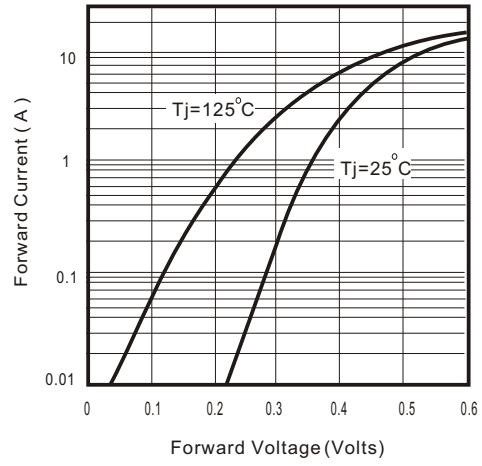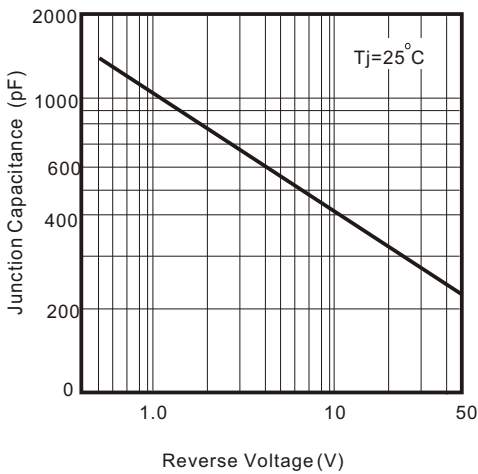

Fig. 2 - Forward Characteristics

Fig. 3 - Junction Capacitance

Fig. 4 - Current Derating Curve