

CDBD8060-HF Thru. CDBD8100-HF

Reverse Voltage: 60 to 100 Volts

Forward Current: 8.0 Amp

RoHS Device

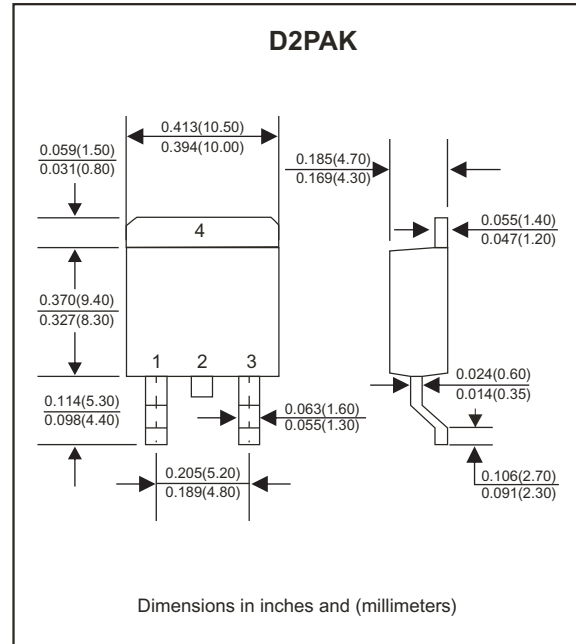
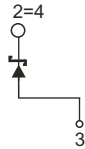
Halogen Free

Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

Mechanical data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: TO-263/D2PAK, Transfer Molded.
- Terminals: solderable per MIL-STD-202, method 208.
- Polarity: As marked.
- Weunting Position: Any
- Weight: 1.46 gram(approx.).



Maximum Ratings (At Ta=25°C, unless otherwise noted)

Parameter	Symbol	CDBD 8060-HF	CDBD 8100-HF	Unit
Maximum Recurrent peak reverse voltage	V_{RRM}	60	100	V
Maximum RMS voltage	V_{RMS}	42	70	V
Maximum DC blocking voltage	V_{DC}	60	100	V
Forward rectified current (See fig. 1)	I_o	8.0		A
Maximum forward voltage at I_o	V_F	0.75	0.85	V
Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	175		A
Maximum Reverse current at 25°C per leg (Note1)	I_R	5.0		mA
Maximum Reverse current at 100°C per leg (Note1)	I_R	50		mA
Typical Thermal resistance junction to case Per Leg	$R_{\theta JC}$	4.0		°C/W
Operating temperature range	T_J	-55 to +150		°C
Storage temperature range	T_{STG}	-55 to +150		°C

Notes: 1. Pulse Test: 300µs pulse width, 1% duty cycle.

RATING AND CHARACTERISTIC CURVES (CDBD8060-HF Thru. CDBD8100-HF)

FIG.1- Forward Derating Curve

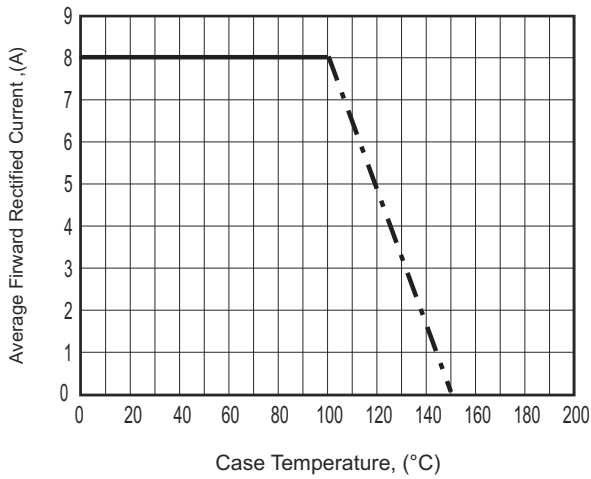


FIG.2-Peak Forward Surge Current

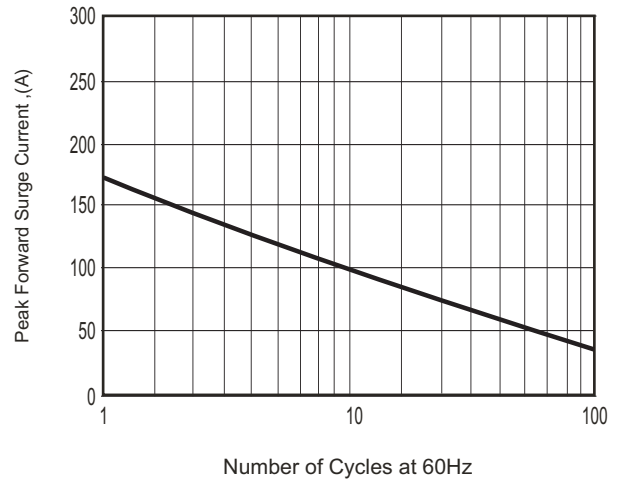


FIG.3 - Typical Forward Characteristic Per Leg

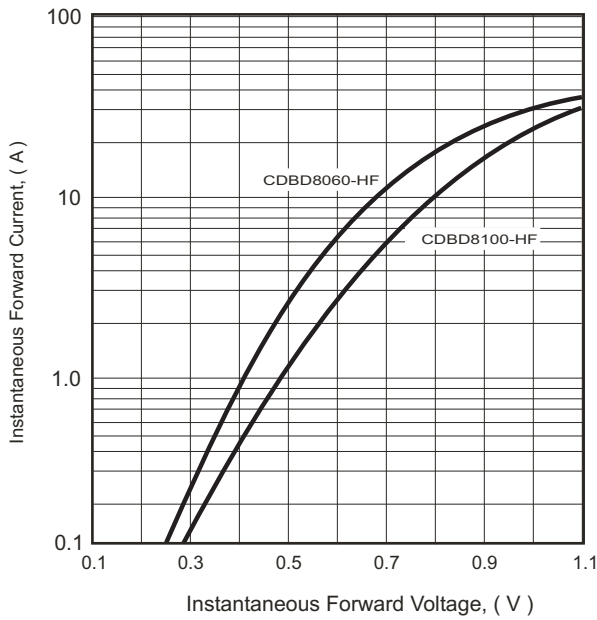
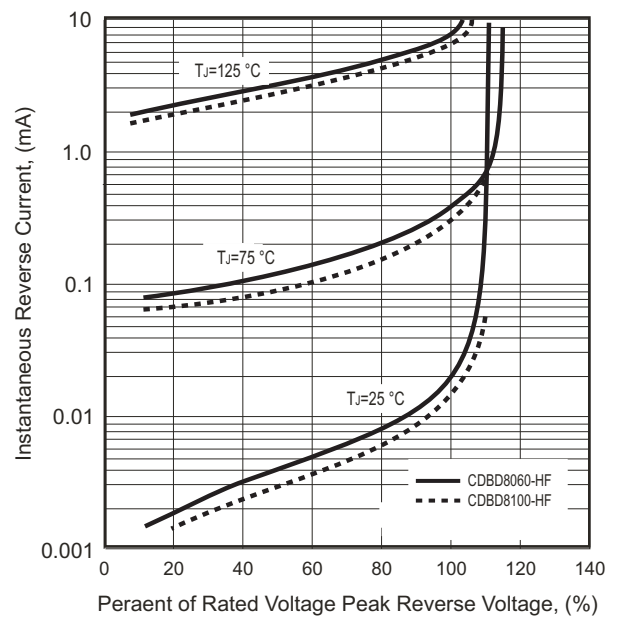
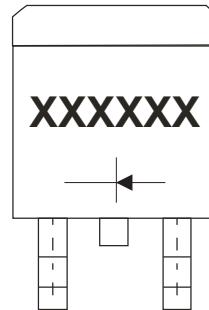


FIG.4-Typical Reverse Characteristics



Marking Code

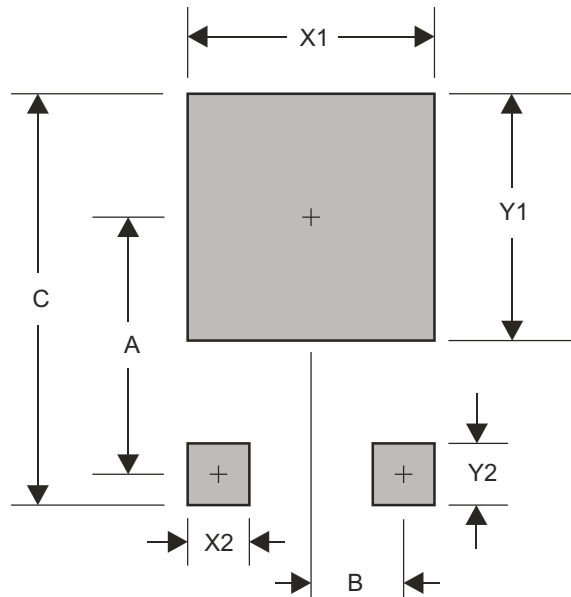
Part Number	Marking Code
CDBD8060-HF	SD8L60
CDBD8100-HF	SD8L100



XXXXXX / XXXXXXXX = Product type marking code

Suggested PAD Layout

SIZE	TO-263 / D2PAK	
	(mm)	(inch)
A	9.50	0.374
B	2.50	0.098
C	16.90	0.665
X1	10.80	0.425
X2	1.10	0.043
Y1	11.40	0.449
Y2	3.50	0.138



Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
TO-263 / D2PAK	50	2,000