

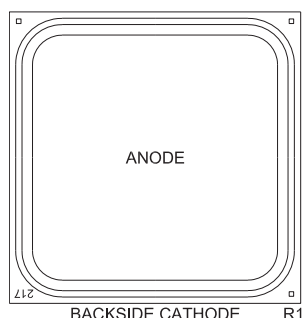
The CPD31X Schottky die is optimized for alternative energy applications. The 6 mil thick die provides an ultra low profile that is readily attached via standard die attach methods. Parametrically, the device is extremely energy efficient as a result of low forward and reverse conduction losses.

FEATURES:

- Low forward voltage at 10 Amps forward current
- Low reverse leakage current
- Low profile geometry
- Metalization suitable for standard die attach technologies
- Top metalization optimized for solder process

APPLICATIONS:

The CPD31X is optimized for use as a by-pass rectifier in low profile solar (PV) panels.



MECHANICAL SPECIFICATIONS:

Die Size	85 x 85 MILS
Die Thickness	5.9 MILS ± 0.8 MILS
Die Passivation	SiN
Anode Bonding Pad Area	78 x 78 MILS
Top Side Metalization	Al/Ni/Au – 30,000Å/4,000Å/1,500Å
Back Side Metalization	Ti/Ni/Au – 1,600Å/5,550Å/1,500Å
Scribe Alley Width	3.15 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	2,260

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
DC Blocking Voltage	V_R	60	V
Average Forward Current	I_O	10	A
Peak Forward Surge Current (tp=8.3ms)	I_{FSM}	250	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=60\text{V}$		75	500	μA
I_R	$V_R=60\text{V}, T_A=100^{\circ}\text{C}$			50	mA
BV_R	$I_R=0.4\text{mA}$	60			V
V_F	$I_F=5.0\text{A}$		0.49		V
V_F	$I_F=10\text{A}$		0.59	0.67	V

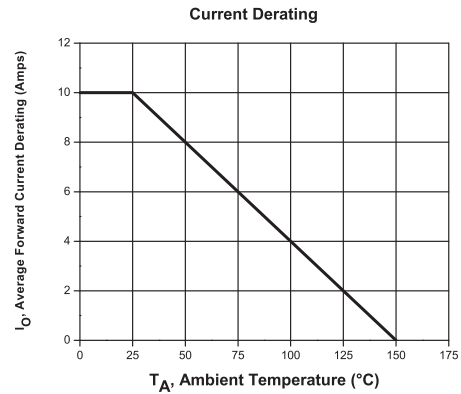
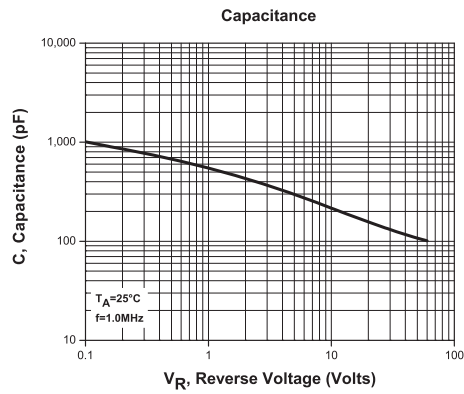
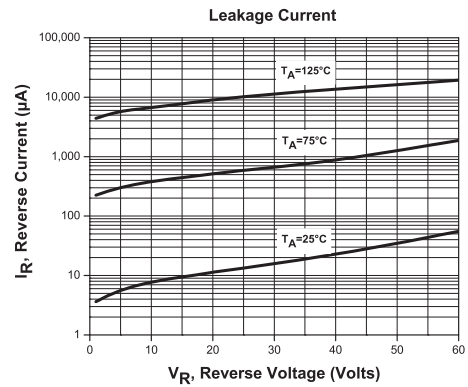
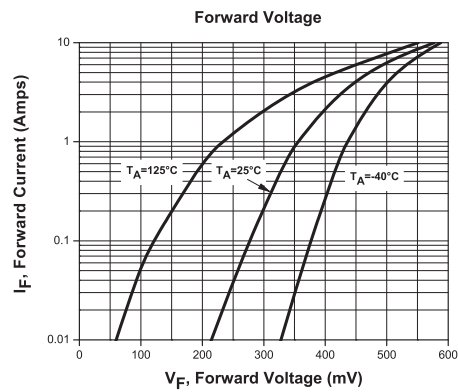
PACKING OPTIONS:

- CPD31X-WN: Full Wafer
- CPD31X-WR: Sawn Wafer on Plastic Ring

R3 (17-October 2011)

CPD31X

Typical Electrical Characteristics



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