

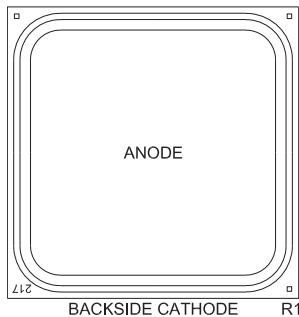
The CPD32X Schottky die is optimized for alternative energy applications. The 6 mil thick die provides an ultra low profile that is readily attached via standard die attach methods. Parametrically, the device is extremely energy efficient as a result of low forward and reverse conduction losses.

**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 wire bonding

**APPLICATIONS:**

The CPD32X 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 $\pm$ 0.8 MILS
Die Passivation	SiN
Anode Bonding Pad Area	75 x 75 MILS
Top Side Metalization	Al – 30,000Å
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:** ( $T_A=25^\circ\text{C}$ )

Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
DC Blocking Voltage	$V_R$	40	V
Average Forward Current	$I_O$	10	A
Peak Forward Surge Current ( $t_p=8.3\text{ms}$ )	$I_{FSM}$	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
$I_R$	$V_R=10\text{V}$		10	200	$\mu\text{A}$
$I_R$	$V_R=40\text{V}$		30	500	$\mu\text{A}$
$I_R$	$V_R=40\text{V}, T_A=100^\circ\text{C}$		15	50	mA
$BV_R$	$I_R=0.5\text{mA}$	40			V
$V_F$	$I_F=5.0\text{A}$		0.43	0.48	V
$V_F$	$I_F=10\text{A}$		0.48	0.52	V

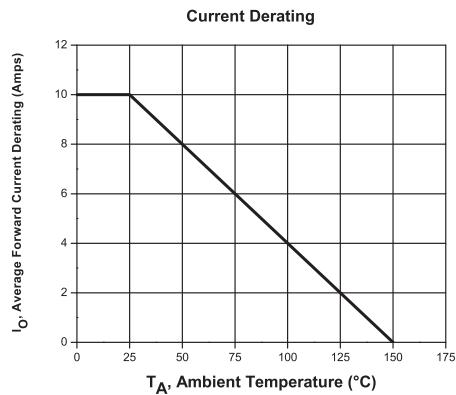
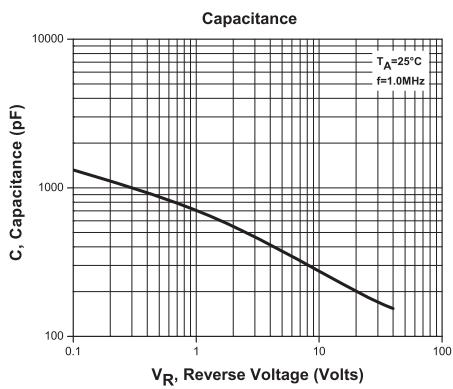
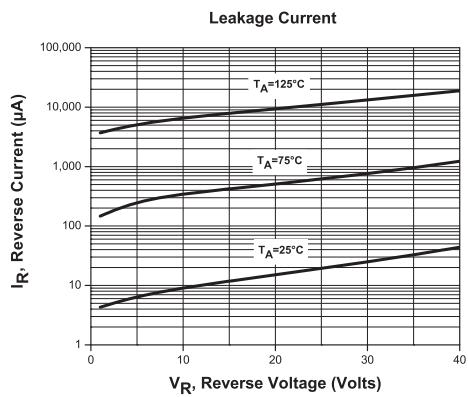
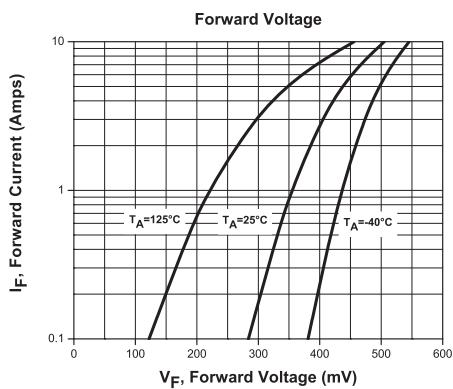
**PACKING OPTIONS:**

- CPD32X-WN: Full Wafer
- CPD32X-WR: Sawn Wafer on Plastic Ring

R3 (2-December 2011)

# CPD32X

## Typical Electrical Characteristics



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