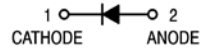




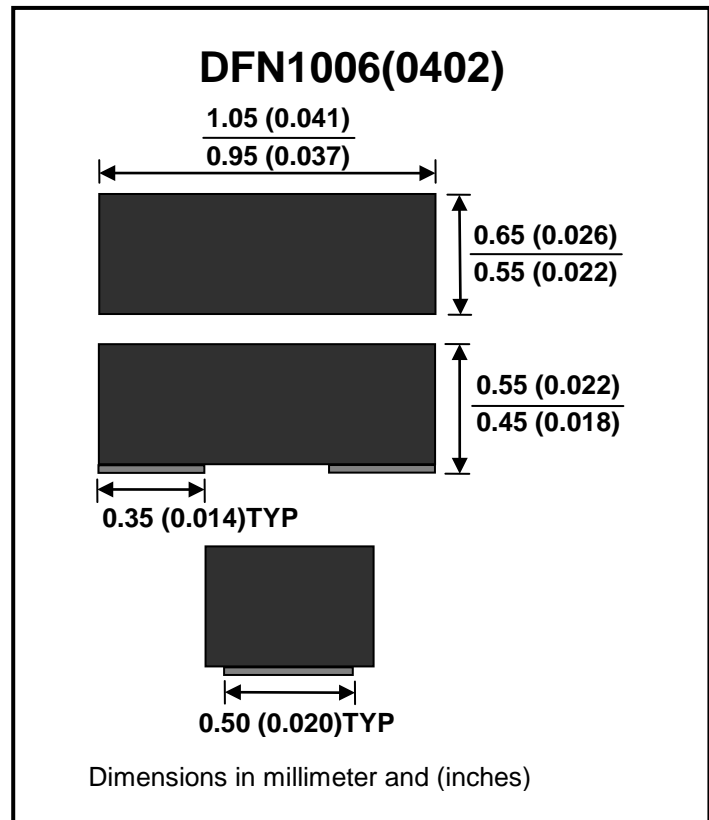
**CDB0520QRL 0.5A 20V**  
**CDB0530QRL 0.5A 30V**  
**CDB0540QRL 0.5A 40V**

**FEATURES**

- Low forward voltage
- Designed for mounting on small surface
- Extremely thin / leadless package
- Majority carrier conduction
- Pb free version, RoHS compliant, and Halogen free

**MECHANICAL CHARACTERISTICS**

- Case: DFN1006(0402) mold package
- Terminal: Sn/Au plated, solderable per MIL-STD-750, method 2026
- Marking:  
CDB0520QRL: cathode band &12  
CDB0530QRL: cathode band &13  
CDB0540QRL: cathode band &BN
- Weight: 0.001 gram(approx.)
- MSL: Level 1

**Maximum Rating And Electrical Characteristics (at Ta=25°C unless otherwise noted)**

Parameter	Condition	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage	CDB0520QRL CDB0530QRL CDB0540QRL	VRRM			20 30 40	V
Reverse voltage	CDB0520QRL CDB0530QRL CDB0540QRL	VR			20 30 40	V
Average forward current		Io			500	mA
Forward current surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	IFSM			5	A
Storage/Operation temperature		T <sub>sgt</sub>	-40		125	°C
Junction temperature		T <sub>J</sub>			100	°C
Forward voltage	IF1=10mA IF2=500mA	VF		0.23 0.41	0.27 0.46	V
Reverse current	VR1=10V VR2=20V VR3=30V VR4=40V	IR1 IR2 IR3 IR4		9 12 14 16	20 30 40 50	uA



Typical Characteristics

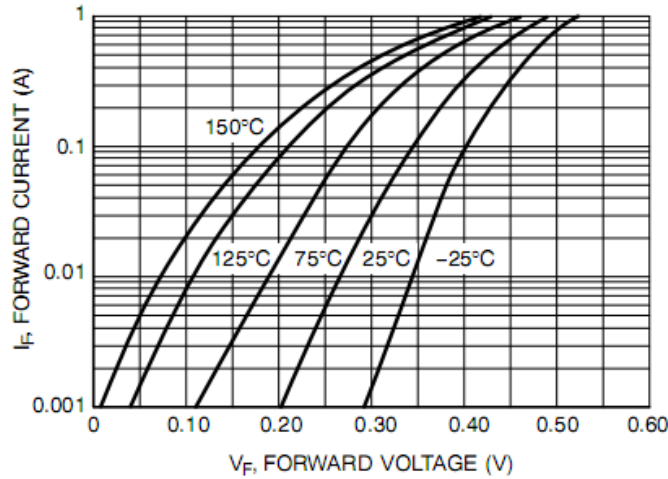


Figure 1. Forward Voltage

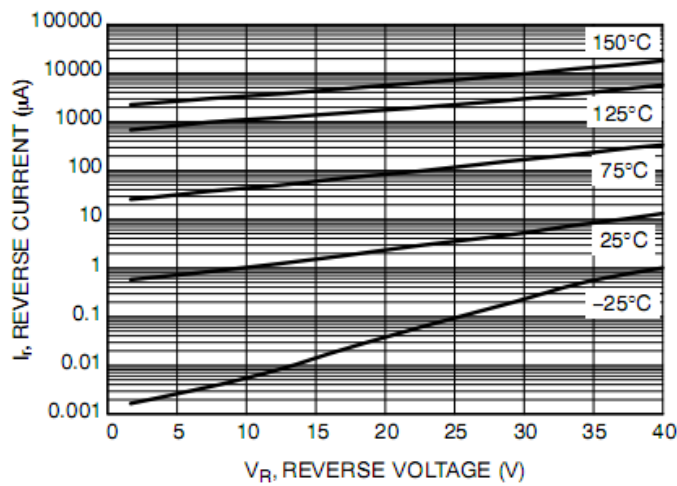


Figure 2. Leakage Current

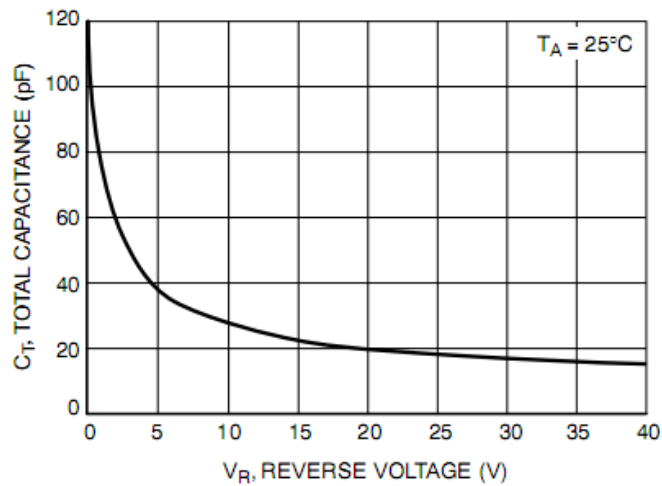
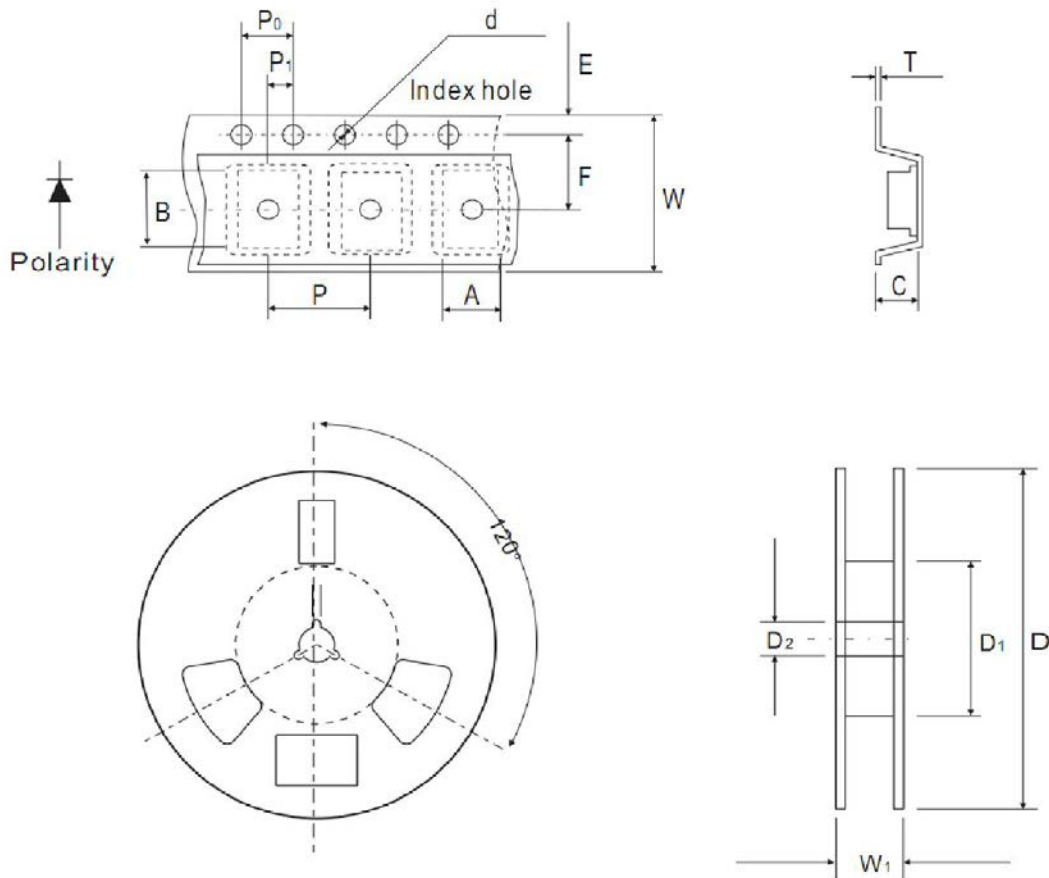


Figure 3. Total Capacitance



Packing Specification



Tape & Reel Dimensions

Package	Unit	A	B	C	d	D
DFN1006	mm	0.67±0.10	1.12±0.10	0.60±0.10	1.50±0.10	178±1
	inch	0.026±0.004	0.044±0.004	0.024±0.004	0.060±0.004	7.008±0.04

Package	Unit	D1	D2	E	F	P
DFN1006	mm	60MIN	13.0±0.20	1.75±0.10	3.5±0.10	4.0±0.10
	inch	2.362MIN	0.512±0.008	0.069±0.004	0.138±0.004	0.157±0.004

Package	Unit	P0	P1	T	W	W1
DFN1006	mm	4.0±0.10	2.0±0.10	0.22+0.03	8.0±0.10	13.5MAX
	inch	0.157±0.004	0.079±0.004	0.009±0.002	0.315±0.004	0.531MAX



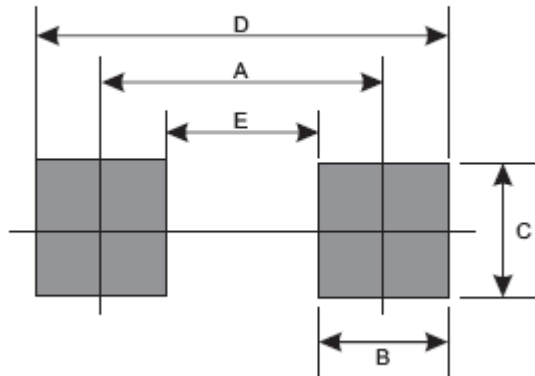
### Schottky Barrier Diode

Crownpo Technology

#### Standard Package

Package	Reel Size	Qty/Reel
DFN1006	7"	5,000 pcs

#### Recommended Soldering Footprint



#### Reflow Soldering

Product Size	Dimension/ mm				
	A	B	C	D	E
DFN1006	0.750	0.500	0.700	1.250	0.250
	0.030"	0.020"	0.028"	0.049"	0.010"

#### Marking Code

Part Number	CDB0520QRL	CDB0530QRL	CDB0540QRL
Marking	12	13	BN

#### DISCLAIMERS

These products are not designed for use in applications where any failure or malfunction may result in personal injury, death or severe property or environmental damage such as medical, military, aircraft, space or life support equipments.