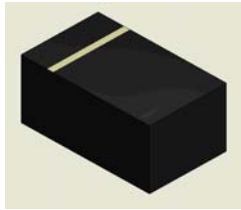




CDB0140QRL

100mA 40V

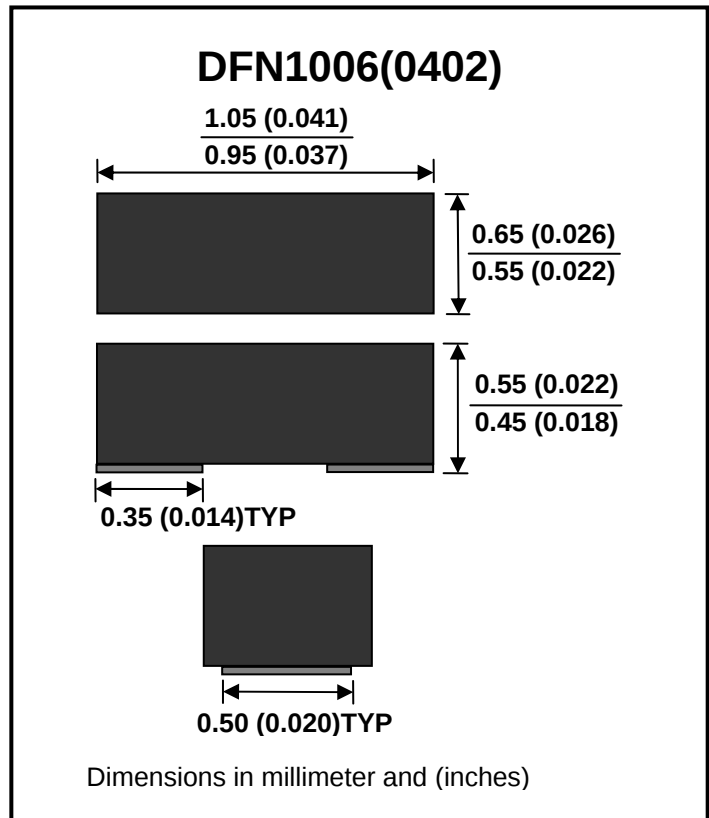


Features

- 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
- Terminals: Sn/Au plated, solderable per MIL-STD-750, method 2026.
- Marking code: cathode band & B8
- Mounting position: Any.
- Weight: 0.001 gram(approx.)



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

Parameter	Condition	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V_{RRM}			43	V
Reverse voltage		V_R			40	V
Average forward current		I_o			100	mA
Forward current surge peak	8.3ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			1	A
Power Dissipation		P_D			125	mW
Storage/Operation temperature		T_{Sgt}	-40		+125	°C
Junction temperature		T_j			+125	°C
Forward voltage	IF1=10mA IF2=100mA	V_F			0.34 0.55	V
Reverse current	VR1=10V VR2=40V	I_R			10 40	uA
Capacitance between terminals	f = 1 MHz, and 10 VDC reverse voltage	C_T		6		pF



Typical Characteristics

Fig. 1 - Forward characteristics

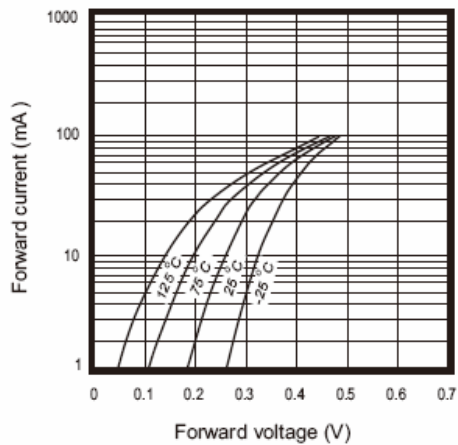


Fig. 2 - Reverse characteristics

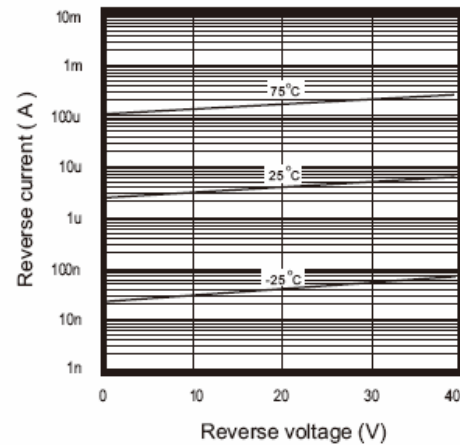


Fig. 3 - Capacitance between terminals characteristics

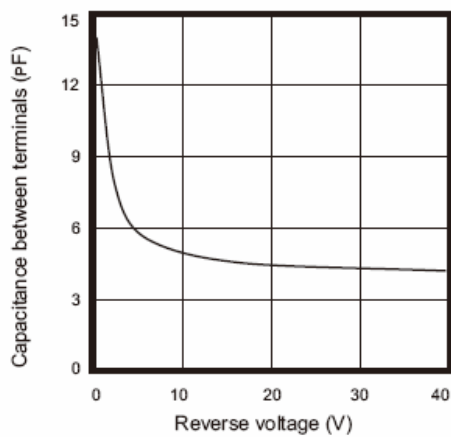
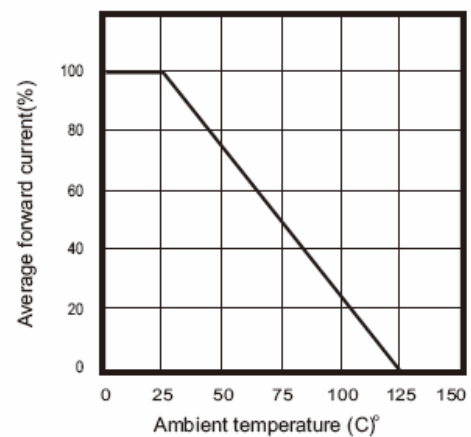
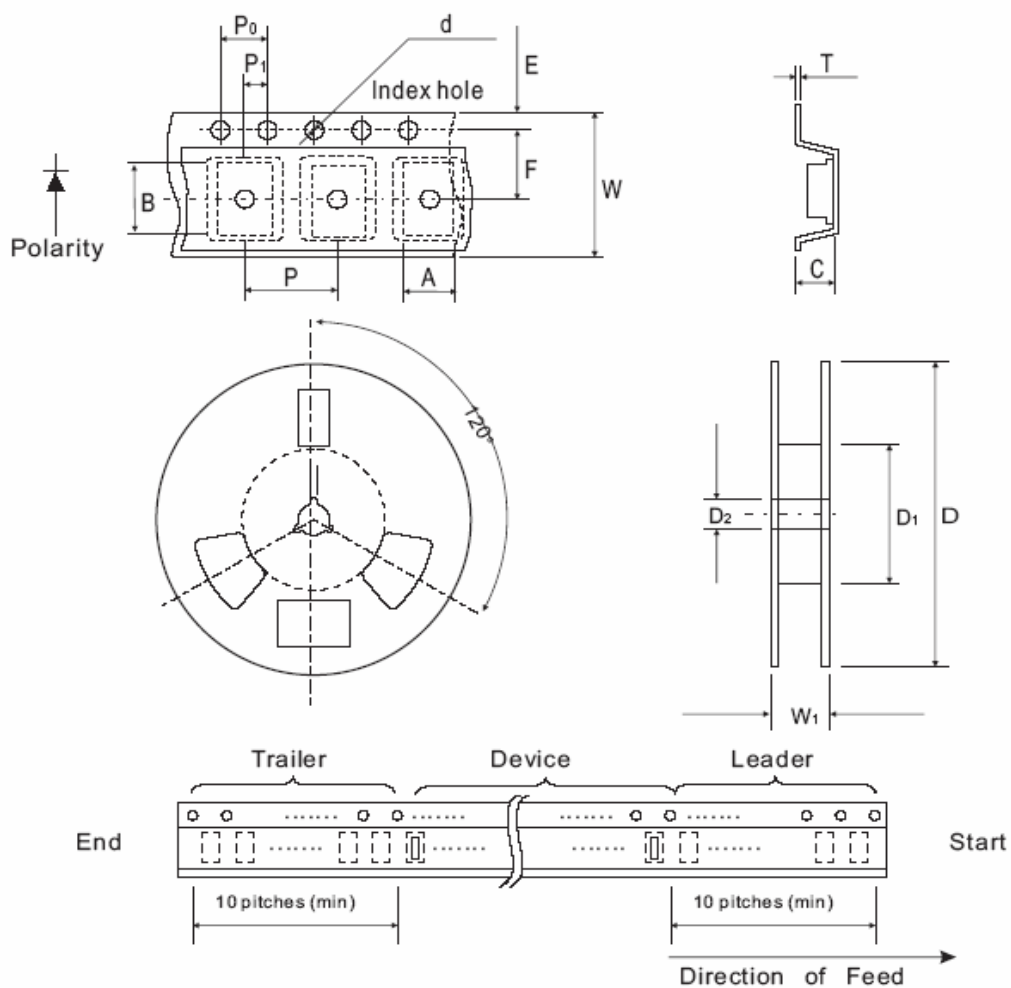


Fig.4 - Current derating curve





Packing Specification



Tape & Reel Dimensions

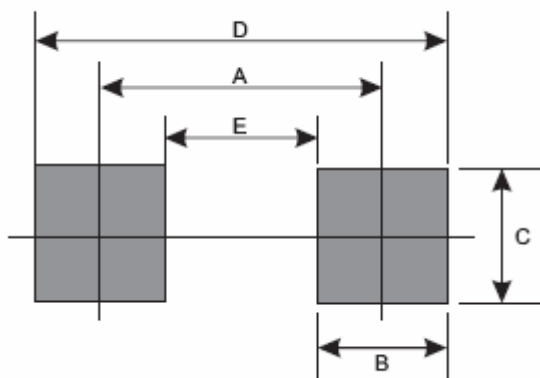
Package	Unit	A	B	C	d	D
DFN1006	mm	0.67±0.10	1.12±0.10	0.60±0.10	1.50±0.10	178±1
	inch	0.026±0.004	0.044±0.004	0.024±0.004	0.060±0.004	7.008±0.04

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	10.5±0.5
	inch	0.157±0.004	0.079±0.004	0.009±0.002	0.315±0.004	0.413±0.02

**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	Marking Code
CDB0140QRL	B8

**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.