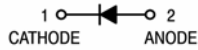




Switching Diode

CD4148WQR

150mA 75V

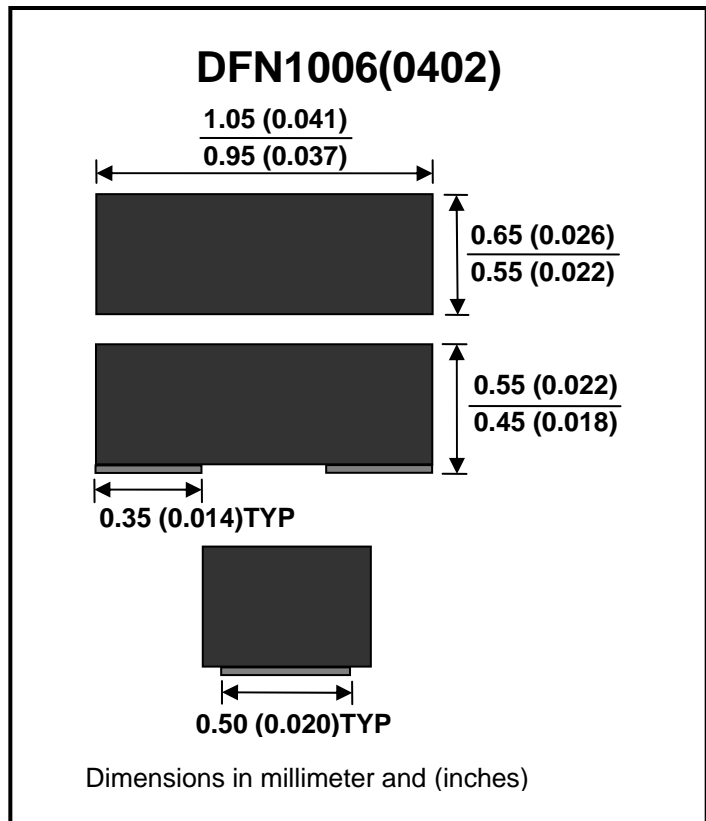


Features

- Designed for mounting on small surface
- Low leakage current
- High mounting capability, strong surge withstand, high reliability
- Lead free and RoHs compliance components

Mechanical Characteristics

- Case: DFN1006(0402) mold package
- Terminal: Sn/Au plated, solderable per MIL-STD-750, method 2026
- Marking: cathode band & S3
- 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		VRRM			100	V
Reverse voltage		VR			75	V
Average forward current		Io			150	mA
Forward current surge peak	Tp=1 us Tp=1 ms	IFSM		4 1		A
Power Dissipation		PD			125	mW
Storage/Operation temperature		TSgt	-40		+125	°C
Junction temperature		TJ	-40		+125	°C
Forward voltage	IF=50mA	VF			1	V
Reverse current	VR=20V VR=75V	IR			25 2.5	nA uA
Capacitance between terminals	f = 1 MHz, and 10 VDC reverse voltage	CT			4	pF
Reverse recovery time	IF =10 mA, RL =100 ohms, Iirr=1mA	Trr			4	nS



Switching Diode

Typical Characteristics

Fig.1 - Forward Characteristics

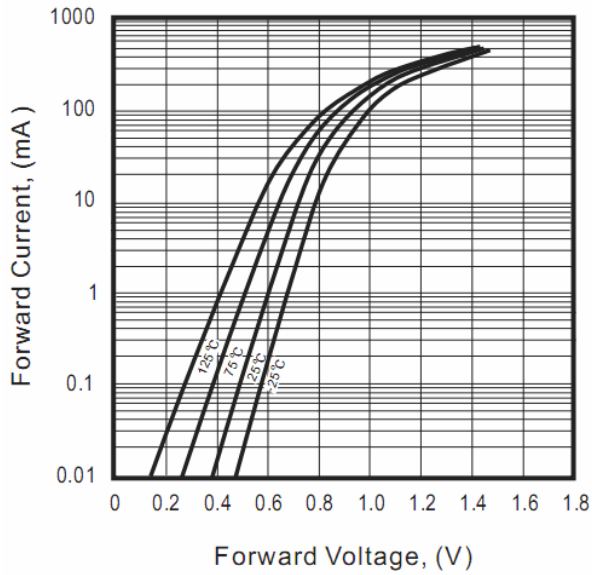


Fig.2 - Reverse Characteristics

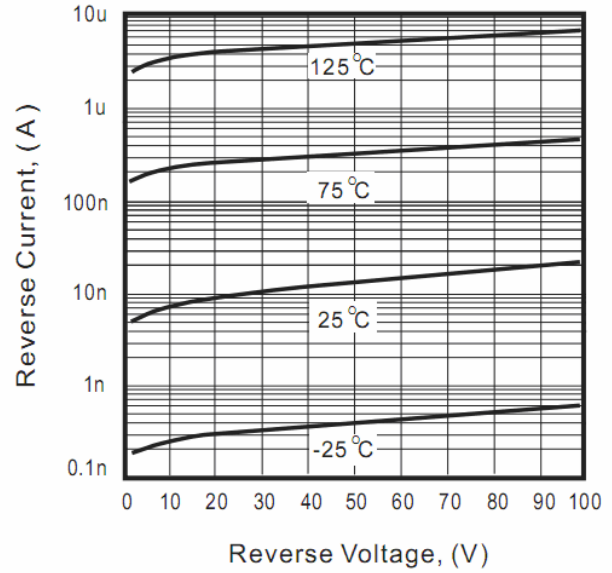


Fig.3 - Capacitance Between Terminals Characteristics

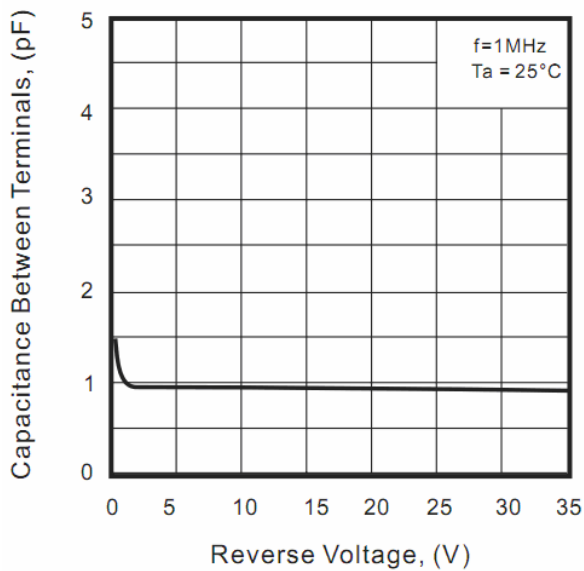
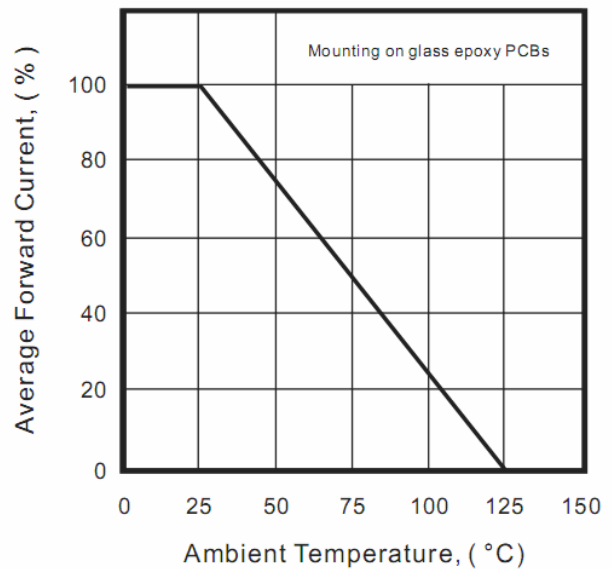


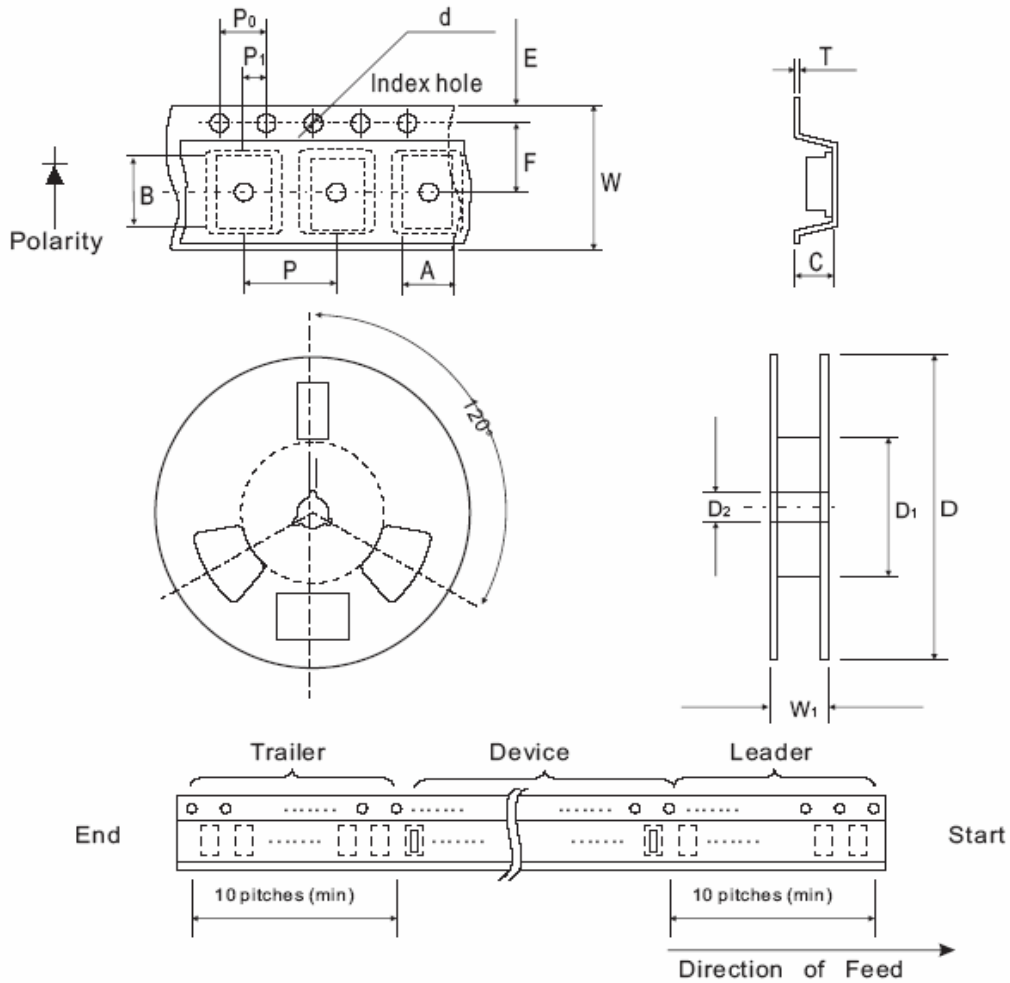
Fig.4 - Current Derating Curve





Switching Diode

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	2.0±0.10
	inch	2.362MIN	0.512±0.008	0.069±0.004	0.138±0.004	0.079±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

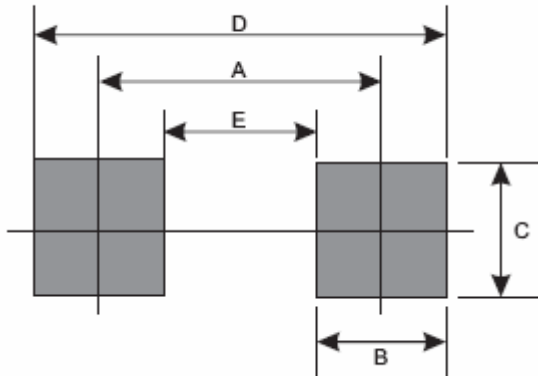


Switching Diode

Standard Package

Package	Reel Size	Qty/Reel
DFN1006	7"	10,000 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
CD4148WQR	S3



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.