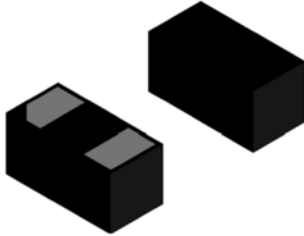


## Small-Signal Fast Switching Diodes



### Features

- Moisture sensitivity level 1
- Reverse voltage: 85V
- Average forward current : 150mA

### Application

- High frequency rectifier
- Signal switching

### Mechanical data

- **Package:** DFN0603-2L
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			T4
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	85
Forward current	I <sub>F</sub>	mA	150
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I <sub>FSM</sub>	A	1
Non-repetitive surge peak forward current @ t=1ms square wave			1.5
Power dissipation	P <sub>D</sub>	mW	100
Junction temperature	T <sub>J</sub>	°C	-55 to +150
Storage temperature	T <sub>STG</sub>	°C	-55 to +150



# 1N4148WDP

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## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V <sub>R</sub>	V	I <sub>R</sub> =0.1mA	85		
Forward voltage	V <sub>F1</sub>	V	I <sub>F</sub> =1mA			0.715
	V <sub>F2</sub>	V	I <sub>F</sub> =10mA			0.855
	V <sub>F3</sub>	V	I <sub>F</sub> =50mA			1.0
	V <sub>F4</sub>	V	I <sub>F</sub> =150mA			1.25
Reverse leakage current	I <sub>R1</sub>	nA	V <sub>R</sub> =20V			25
	I <sub>R2</sub>	uA	V <sub>R</sub> =75V			1
Junction capacitance	C <sub>j</sub>	pF	V <sub>R</sub> =0V, f =1MHZ			4
Reverse recovery time	T <sub>rr</sub>	ns	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, I <sub>rr</sub> =1mA, R <sub>L</sub> =100Ω			4

## ■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R <sub>θJ-A</sub> <sup>(1)</sup>	°C/W	1250
Thermal resistance, junction-to-case	R <sub>θJ-C</sub> <sup>(1)</sup>	°C/W	1000

### Note:

(1) Device mounted on PCB, single-sided copper, with standard footprint



## ■ Characteristics

Fig 1: PD-Ta Curve

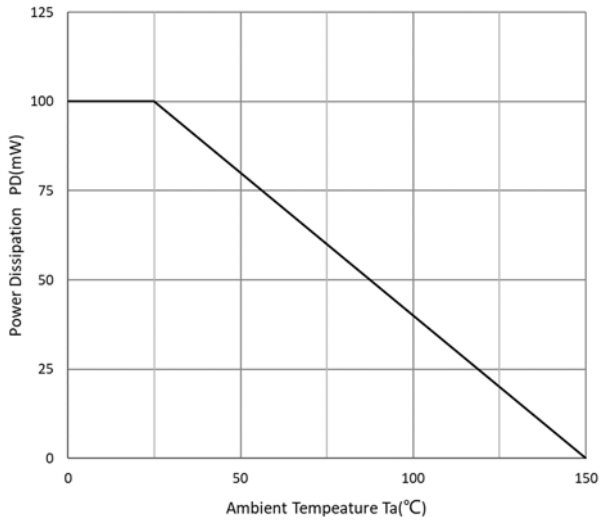


Fig 2: Capacitance Capability

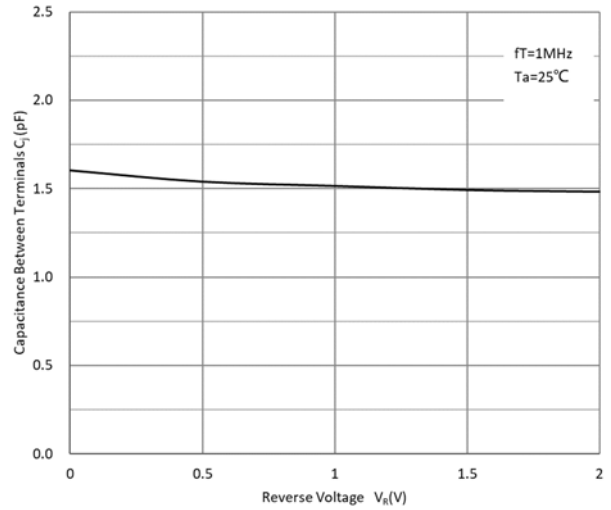


Fig 3: Typical Forward Characteristics

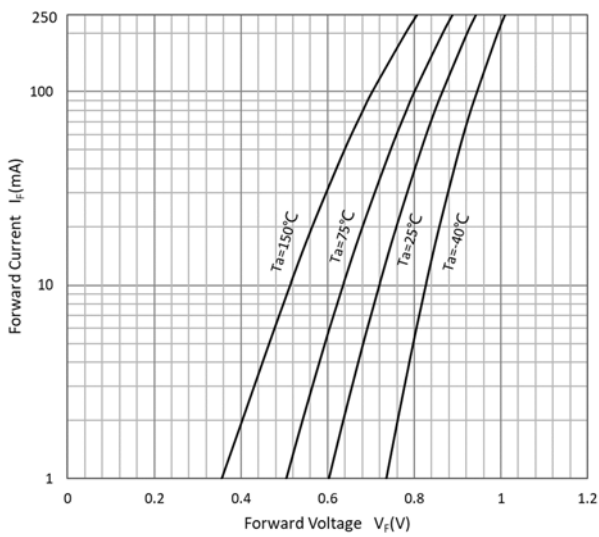
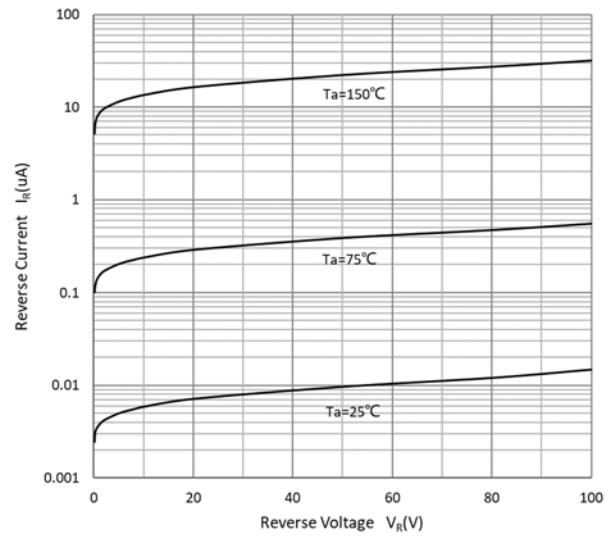


Fig 4: Typical Reverse Characteristics





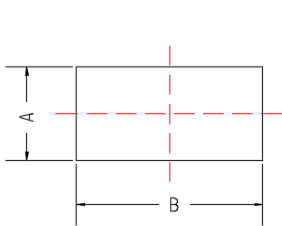
# 1N4148WDP

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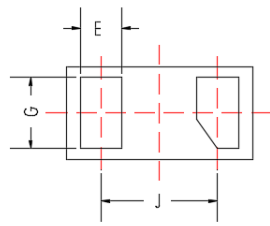
## ■ Ordering Information

Preferred P/N	Packing code	Unit weight(mg)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
1N4148WDP	F1	Approximate 0.18	10000	100000	400000	7" reel

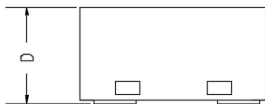
## ■ Outline Dimensions



TOP VIEW



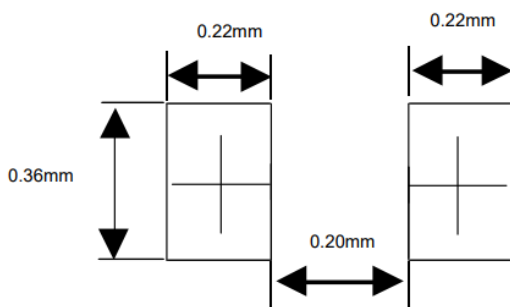
BOTTOM VIEW



SIDE VIEW

DIMENSIONS			
DIM	MM		
	MN	MN	MAX
A	0.250	0.300	0.370
B	0.550	0.600	0.670
D	0.230	0.300	0.340
E	0.105	0.135	0.165
G	0.200	0.230	0.260
J	0.375 BSC		

## ■ Suggested Pad Layout





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