RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

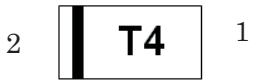
1N4148DF

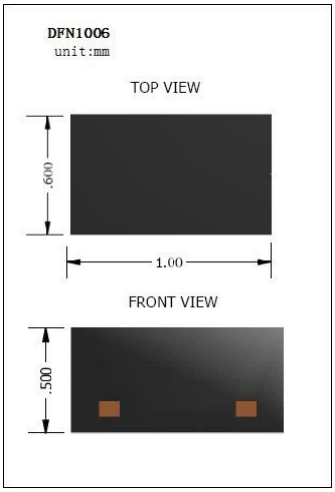
Switching Diode

- ◇ Fast switching devices
- ◇ Low Reverse Leakage Current
- ◇ ROHS Compliant
- ◇ UL-94 V-0 / Green EMC
- ◇ Matte Tin Lead finish (Pb-Free)

Device Marking Code	
1N4148DF	**T4**

Pin & Polarity





Maximum Ratings (Ta = 25 ℃)

Symbol	Parameter	Value	Units
V_{RSM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	75	V
I_{FRM}	Repetitive Peak Forward Current	300	mA
I_O	Average Forward Current	100	mA
I_{FSM}	Non-Repetitive Peak Forward Current *1	2	A
P_D	Power Disspation	200	mW
T_J	Junction Temperature	150	℃
T_{STG}	Storage Temperature	-55 to +150	℃

Electrical Characteristics (Ta = 25 ℃ unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_R	Reverse Voltage	IR=100uA	75			V
V_F	Forward Voltage	IF=5mA IF=10mA IF=100mA IF=150mA	0.62		0.72 0.855 1.0 1.25	V
I_R	Reverse Leakage Current	VR=80V VR=20V			100 25	nA
C	Capacitance	V_R = 0.5V, f = 1MHz			3	pF
T_{RR}	Reverse Recovery Time	I_F = I_R =10mA I_{RR} = 1mA, R_L = 100Ω			4	ns

*1: Pulse width = 1 μs

2023-09/03
REV:B

RATING AND CHARACTERISTICS CURVES (1N4148DF)

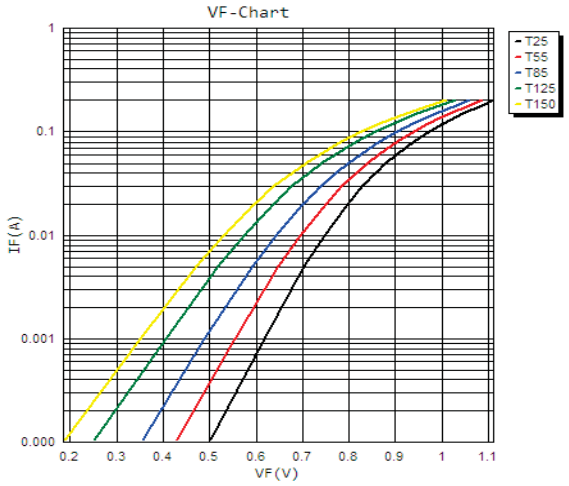


Fig.1 Forward current(IF) vs Forward voltage(VF)

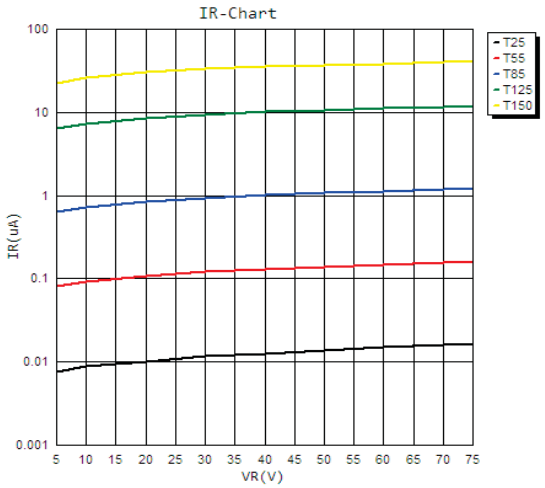


Fig.2 Reverse current(IR) vs Reverse voltage(VR)

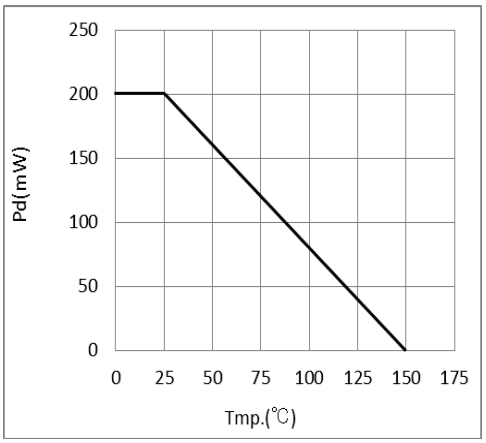


Fig.3 Power Derating Curve

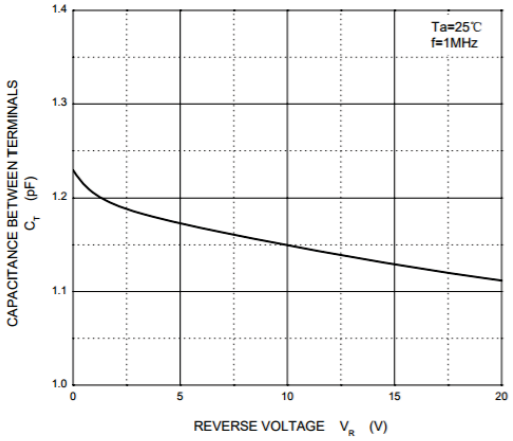


Fig.4 Capacitance vs Reverse voltage(VR)

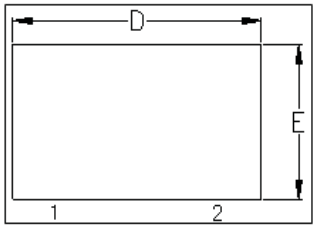
ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Package Code
1N4148DF	DFN1006-2L	Tape & Reel 10000pcs /7" Reel	8mm	4mm	Conductive	-T

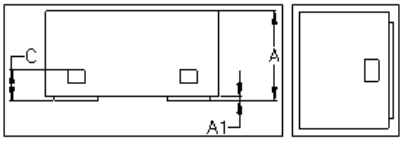
Package Dimensions

Package outline : DFN1006-2L

Top view



Side view



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0.00	0.02	0.05
b	0.45	0.50	0.55
C	0.12	0.15	0.18
D	0.95	1.00	1.05
e		0.65BSC	
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1		0.05 REF.	
h	0.07	0.12	0.17

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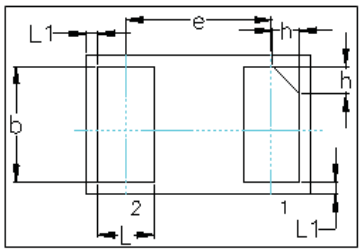
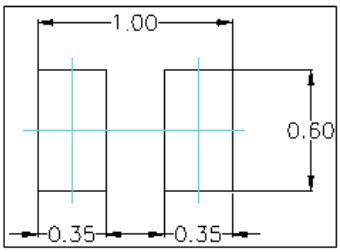
Back view



Soldering Pattern



Notice:

1 Lead plating: Pb free solder
2 Lead thickness includes solder plating
3 Lead frame: Copper A194
4 Other Tolerance: ± 0.05
5 Dimensions are exclusive of Burrs,Mold Flash and Tie Bar extrusions
6 Unit: mm

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