

150mW DFN1006-2 Fast Switching Diode

Features

- Fast Switching Device ($T_{rr} < 4.0 \text{ nS}$)
- Power Dissipation of 150mW
- High Stability and High Reliability
- Low reverse leakage
- AEC-Q 101 qualified (Automotive grade with suffix " Q ")

Mechanical Data

- DFN1006-2 Small Outline Plastic Package
- Color band denotes cathode end
- Mounting Position: Any

DFN1006-2



Top View

Bottom View

MARKING: T4

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

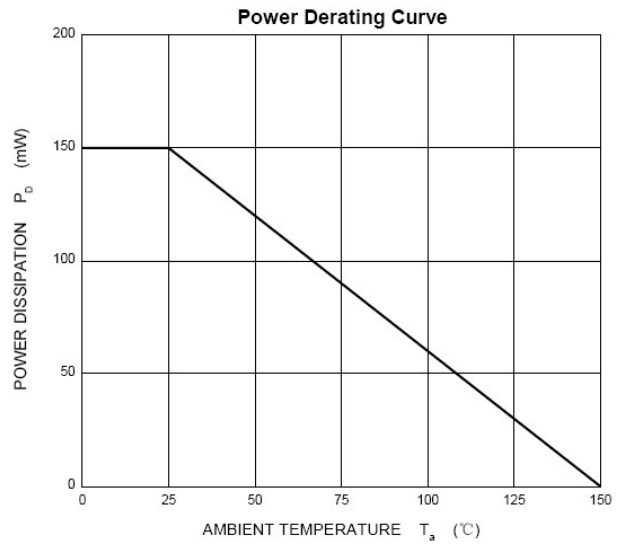
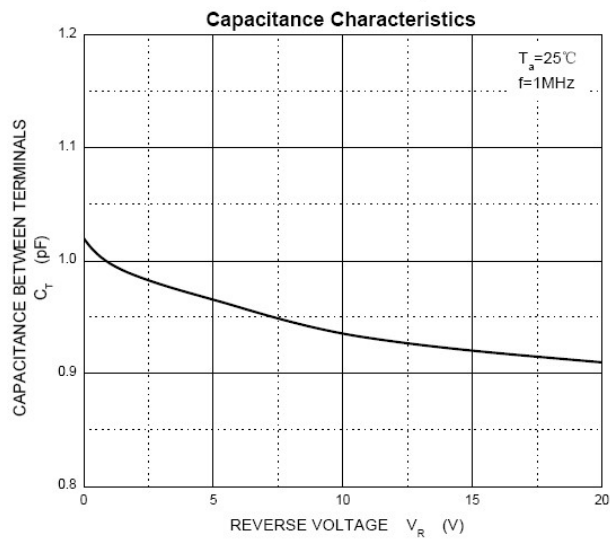
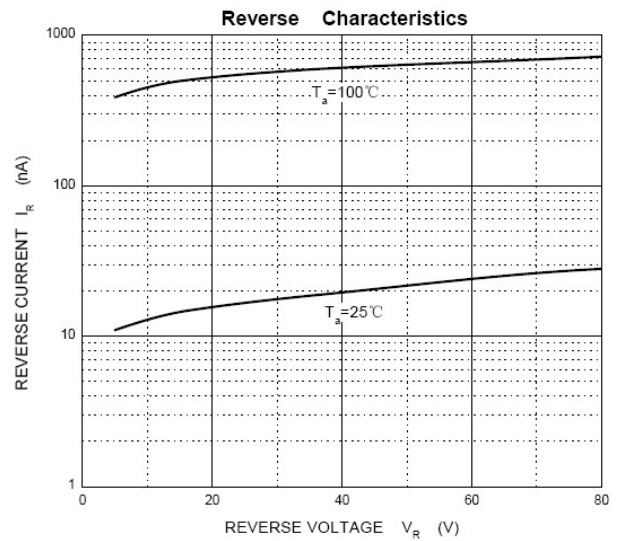
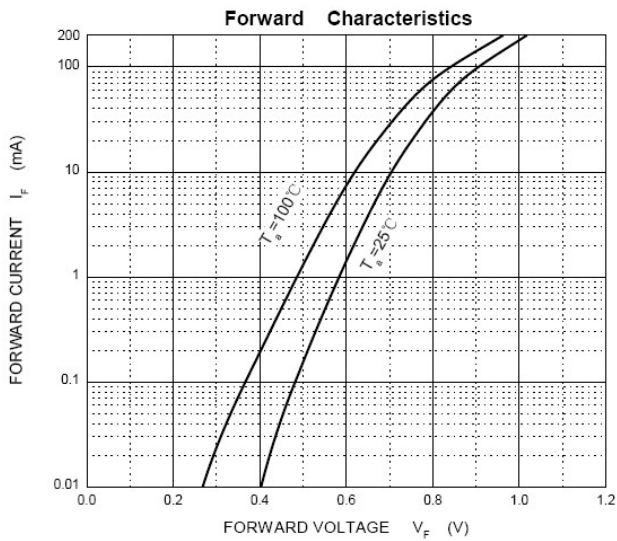
Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Power Dissipation	P_d	150	mW
Operating junction temperature	T_j	150	°C
Storage temperature range	T_s	-55-+150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	°C/W
Average Rectified Current	I_o	150	mA
Non-repetitive Peak Forward Current	I_{FM}	300	mA
Peak Forward Surge Current @ $t_p=1\mu s$; $T_A=25^\circ C$	I_{FSM}	2.0	A

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

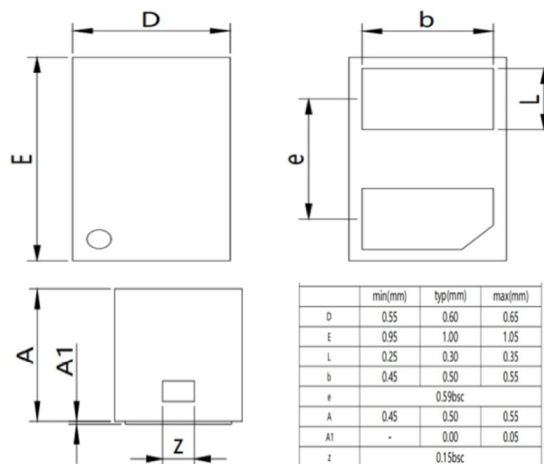
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
BV	Breakdown Voltage	$I_R=100\mu A$	100		V
		$I_R=5\mu A$	75		
IR	Reverse Leakage Current	$V_R=20V$	---	25	nA
		$V_R=75$	---	1	uA
VF	Forward Voltage	$I_F=1.0mA$	---	0.715	V
		$I_F=10mA$	---	0.855	
		$I_F=50mA$	---	1.00	
		$I_F=150mA$	---	1.25	
TRR	Reverse Recovery Time	$I_F=I_R=10mA$	---	4	nS
		$RL=100\Omega$			
		$IRR=0.1 \times I_R$			
CT	Capacitance	$V_R=0V, f=1MHZ$	---	2	pF

Typical Characteristics



DFN1006-2 PACKAGE OUTLINE

Plastic surface mounted package



Ordering information

Device	Package	Reel	Marking	Shipping
1N4148DB	DFN1006-2L(Pb-free)	7"	T4	10000/Tape & Reel