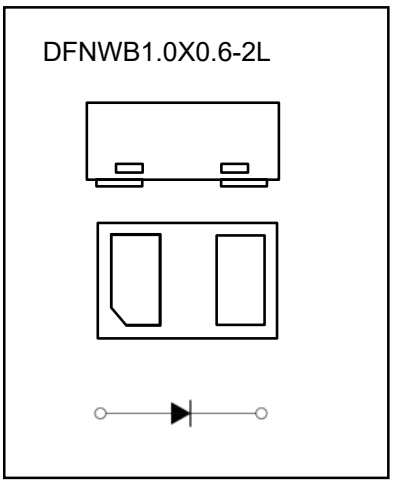
DFNWB1.0X0.6-2L Plastic-Encapsulate Diodes

FEATURES

- Low Forward Voltage Drop
- Very Small SMD Package
- AEC-Q101 qualified (Automotive grade with suffix "Q".)



APPLICATIONS

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

MARKING: 4A

Front side

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

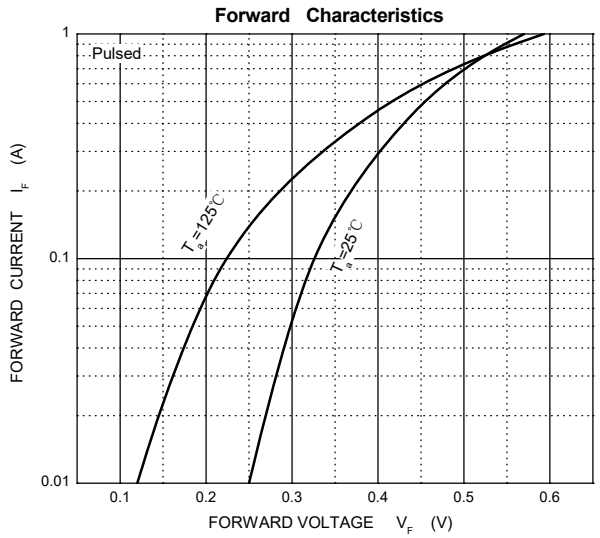
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	7	A
P_D	Power Dissipation (Note 1)	500	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient (Note 1)	250	℃/W
T_j	**Operating Junction Temperature Range**	-40~+125	℃
T_{stg}	**Storage Temperature Range**	-55~+150	℃

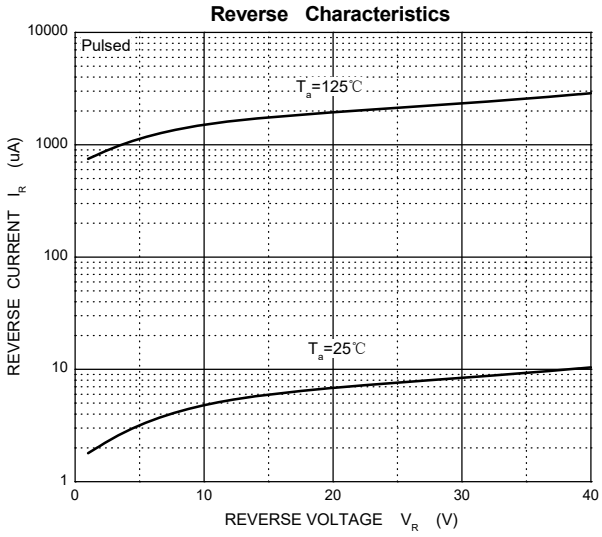
Note: 1.The value of P_D&$R_{\theta JA}$ is measured with the device mounted on 1 in^2 FR-4 board with 2oz. Copper, two sided, in a still air environment with T_a=25℃.

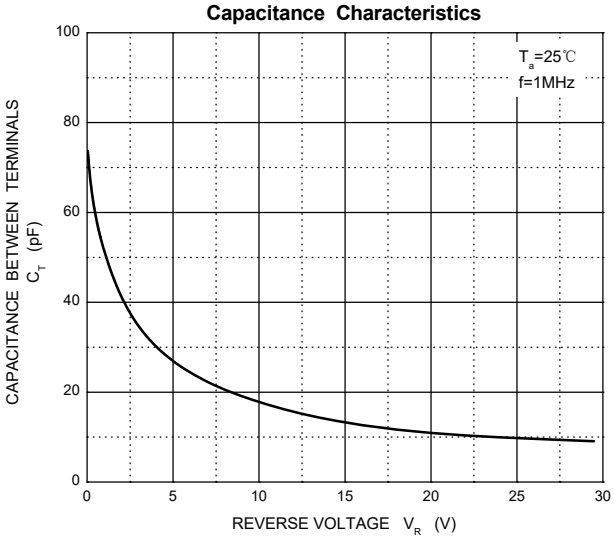
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=1mA	40			V
Reverse current	I_R	V_R=40V		10	40	uA
Forward voltage	V_F	I_F=0.1A		0.33	0.38	V
		I_F=0.2A		0.37	0.40	
		I_F=0.5A		0.45	0.49	
		I_F=0.7A		0.50	0.55	
		I_F=1A		0.57	0.61	
Total capacitance	C_{tot}	V_R=10V,f=1MHz		19		pF

Typical Characteristics

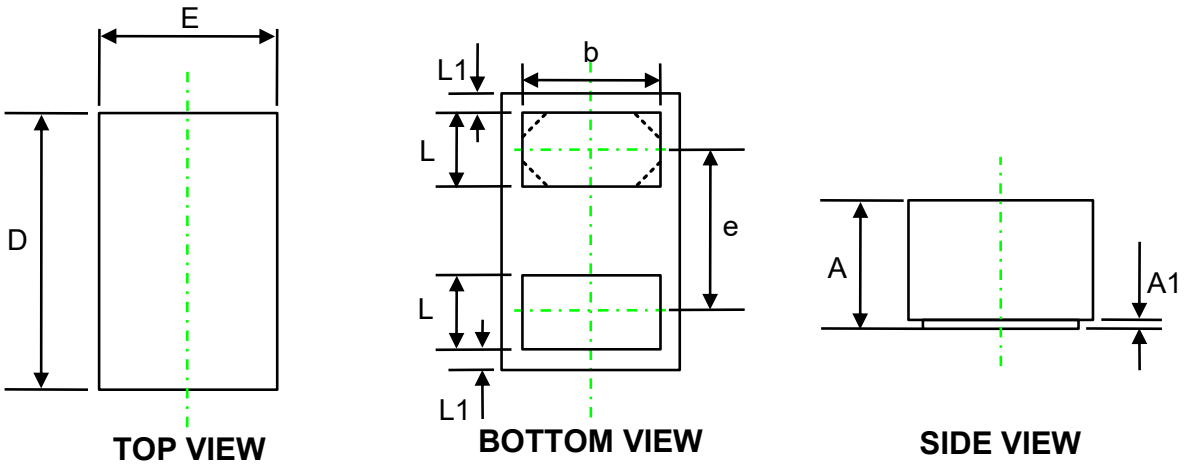






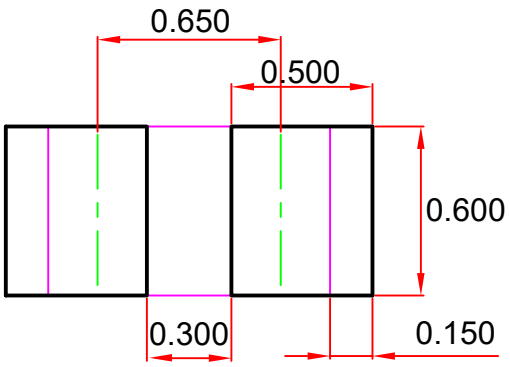
PACKAGE OUTLINE AND PAD LAYOUT INFORMATION

DFNWB1.0×0.6-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters (mm)		
	Min.	Typ.	Max.
A	0.40	0.45	0.50
A1	0.00	0.03	0.05
D	0.95	1.00	1.08
E	0.55	0.60	0.68
b	0.40	0.50	0.60
e	-	0.65	-
L	0.20	0.25	0.30
L1	0.05 REF.		

DFNWB1.0×0.6-2L Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.050mm.
3.The pad layout is for reference purposes only.