

FEATURES

Low Forward Voltage Drop
Very Small SMD Package

DFN1006-2L

APPLICATIONS

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



MARKING: 4A

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	TYP	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1 \text{ mA}$	40			V
Reverse current	I_R	$V_R = 40\text{V}$		10	40	μA
Forward voltage	V_F	$I_F = 0.1 \text{ A}$		0.35	0.38	V
		$I_F = 0.2 \text{ A}$		0.37	0.40	
		$I_F = 0.5 \text{ A}$		0.42	0.49	
		$I_F = 0.7 \text{ A}$		0.47	0.55	
		$I_F = 1 \text{ A}$		0.51	0.61	
Total capacitance	C_{tot}	$V_R = 10\text{V}, f = 1\text{MHz}$		19		pF

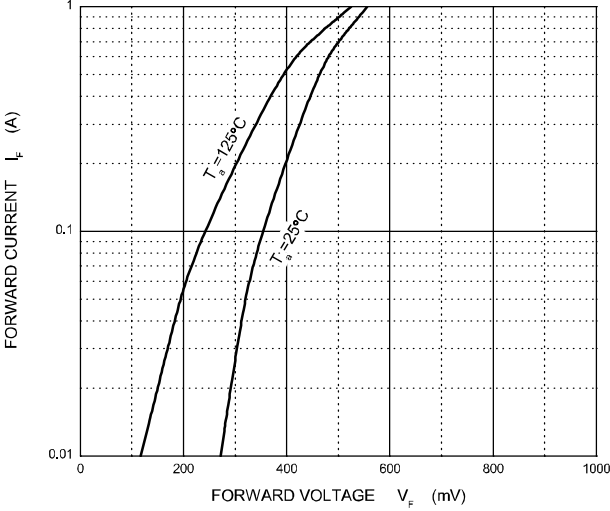
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

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 @ $t=8.3\text{ms}$	7	A
P_D	power Dissipation (Note 1)	500	mw
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	$^{\circ}\text{C/W}$
T_j	Operating Junction Temperature Range	-40 ~ +125	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

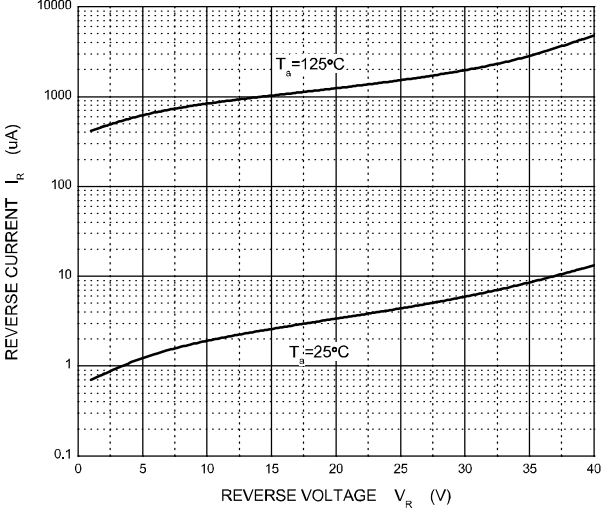
Note: 1. Device mounted on a 1 in.² ceramic PCB which spread 2 ounces of copper.

Typical Characteristics

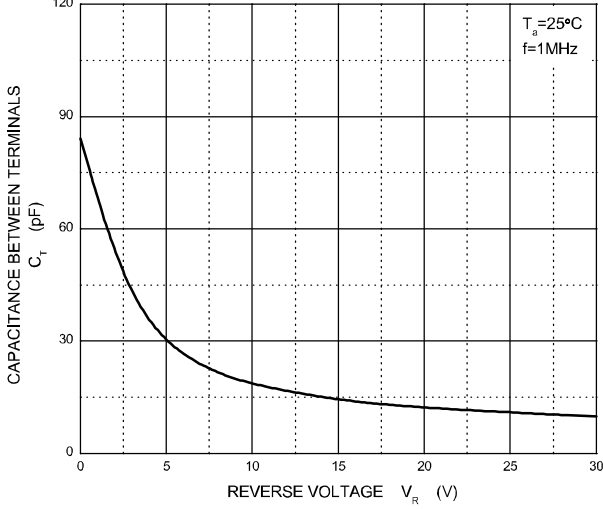
Forward Characteristics



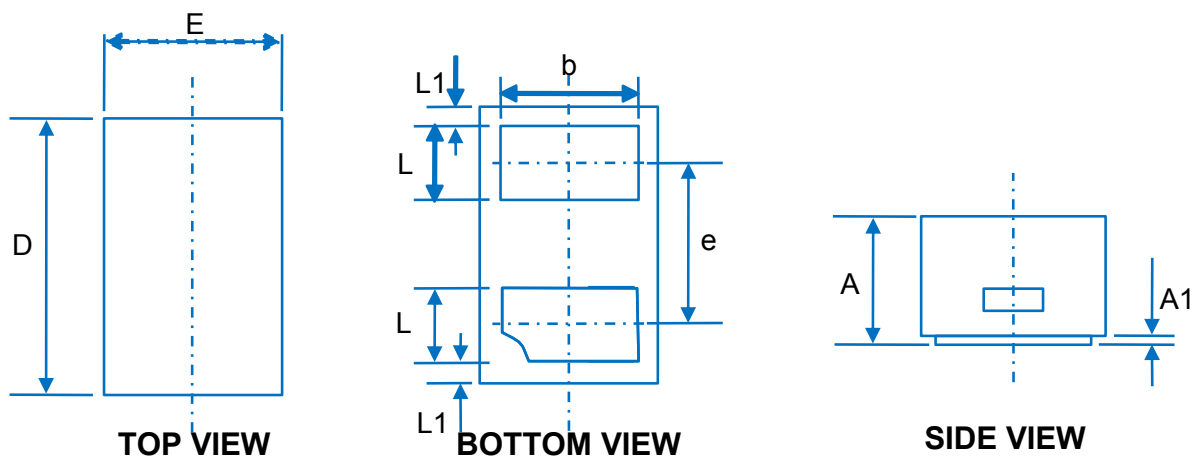
Reverse Characteristics



Capacitance Characteristics

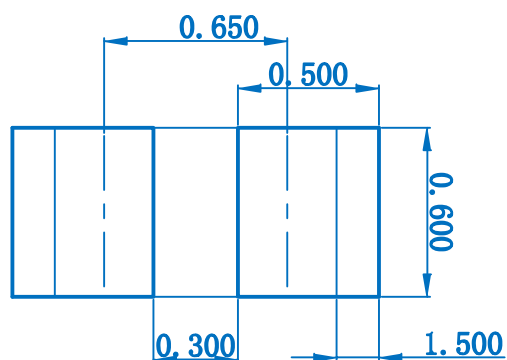


DFN1006-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters (mm)		
	Min.	Typ.	Max.
A	0.44	0.47	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.		

DFN1006-2L Suggested Pad Layout



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

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
TAPING	DFN1006-2L	4A	10000