B1040A1

40V-1A Schottky Barrier Diode

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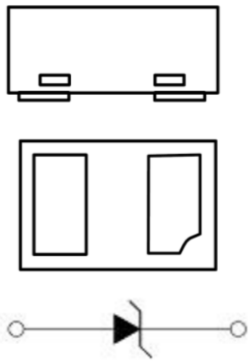
DFN1006-2L



Feature

- Low Forward Voltage Drop
- Very Small SMD Package

Application

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

MARKING:

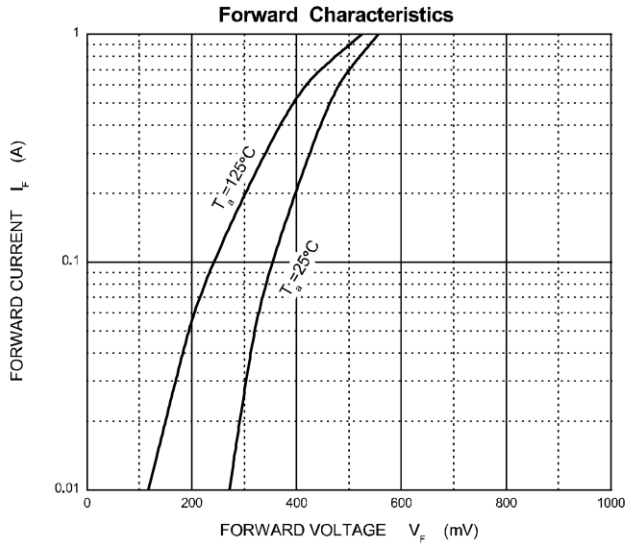
ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

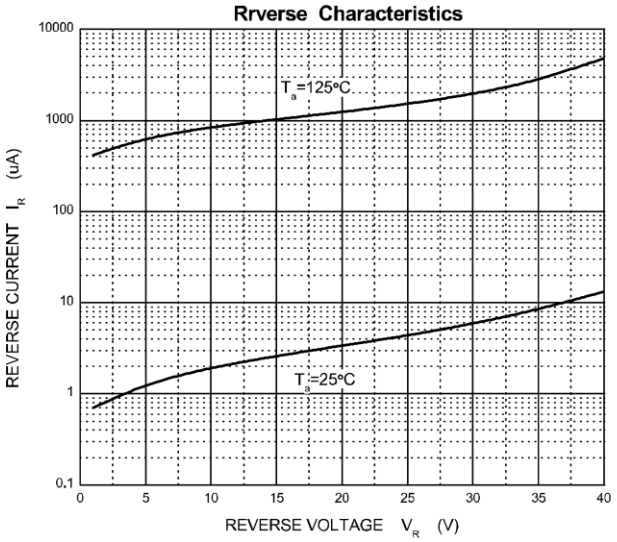
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	7	A
Power Dissipation	P_D	0.1	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1000	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

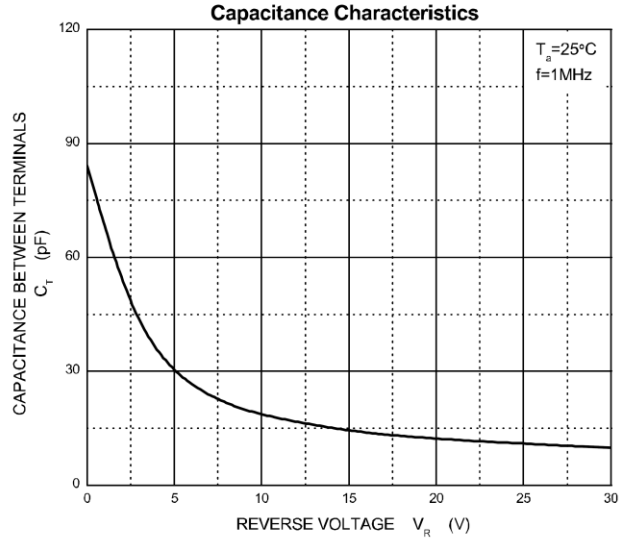
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

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

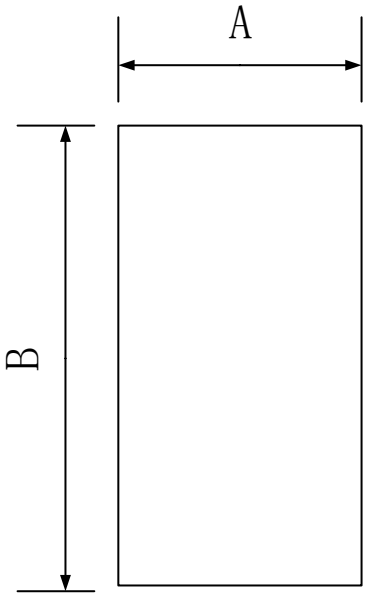
Typical Characteristics



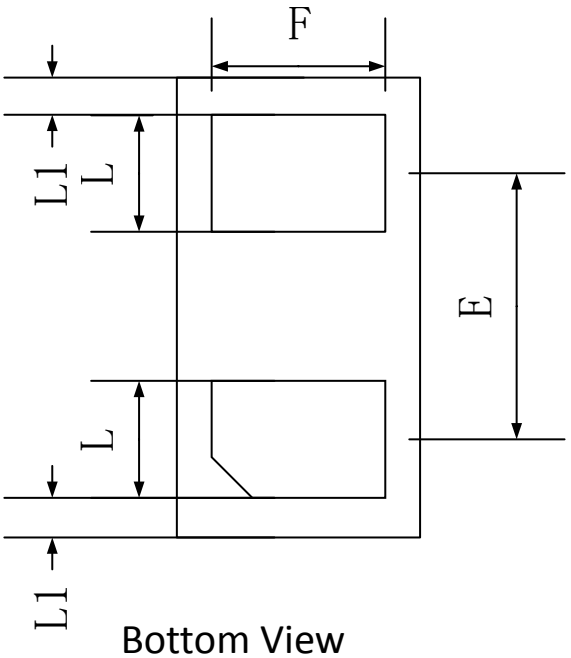




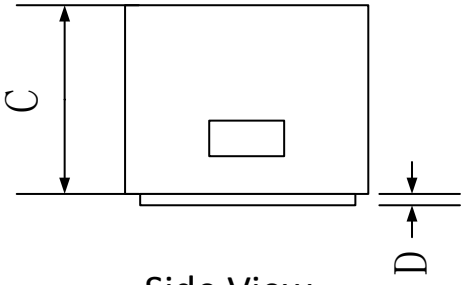
DFN1006-2L Package Outline Dimensions



Top View



Bottom View



Side View

	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	0.55	0.60	0.68
B	0.95	1.00	1.08
C	0.34	0.37	0.40
D	0.00	0.03	0.05
E	-	0.65	-
F	0.40	0.50	0.60
L	0.20	0.25	0.30
L1	0.05REF		