SM5819L2-TP-FS

1.0A Schottky Barrier Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage
- Low current leakage
- For surface mounted applications in order to optimize board space
- High temperature soldering guaranteed: 260℃/10 seconds
- Compliant to RoHS Directive 2011/65/EU



DFN1006-2L



Applications

- Low current rectification
- Switch mode power supply
- Inverse polarity protection
- Low power consumption applications

Marking

Type number	Marking code
SM5819L2-TP-FS	40

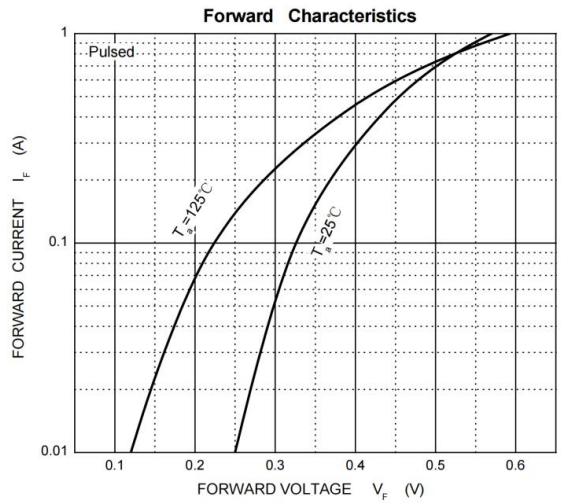
Absolute Maximum Ratings (T=25ºC, RH=45%-75%, unless otherwise noted)

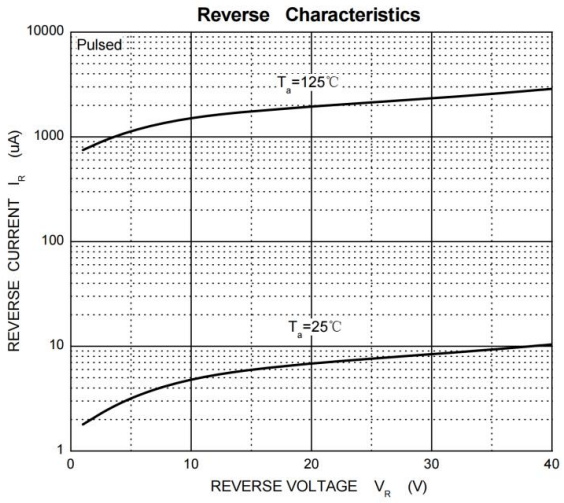
Parameters	Symbol	Limit	Unit
Reverse Voltage (Repetitive Peak)	V_{RRM}	40	V
Reverse Voltage (RMS)	$V_{R(RMS)}$	32	V
DC Blocking Voltage	V_R	40	V
Average Rectified Output Current	I_O	1	A
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	7	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient(Typ)	$R_{\theta JA}$	120	℃/W
Junction Temperature	T_J	-55 ~ +125	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

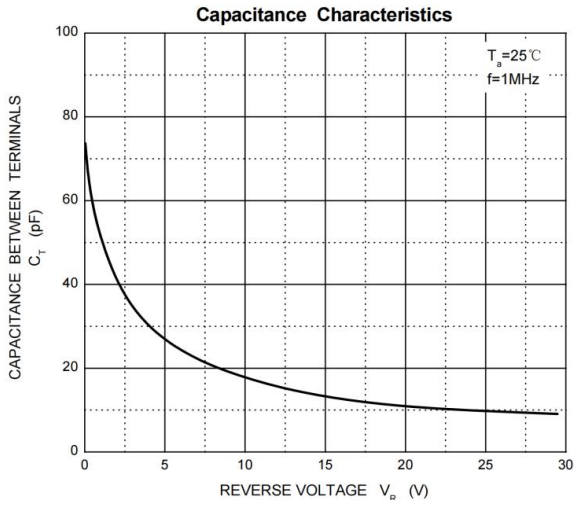
Electrical Characteristics (T=25ºC, RH=45%-75%, unless otherwise noted)

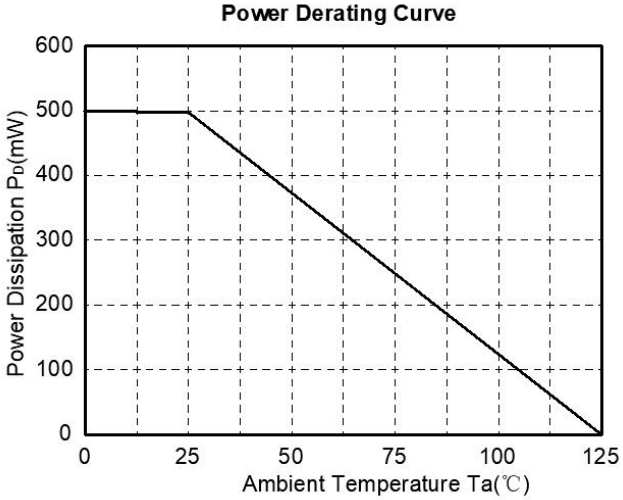
Parameters	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Breakdown V oltage	V_{BR}	I_R=1mA	40			V
Reverse Current	I_R	V_R=40V		10	40	uA
Forward Voltage	V_F	I_F=100mA			0.38	V
		I_F=200mA			0.40	
		I_F=500mA			0.49	
		I_F=700mA			0.55	
		I_F=1A			0.61	
Total Capacitance	C_T	V_R=0V,f=1MHz		75	120	pF

Rating and characteristic curves



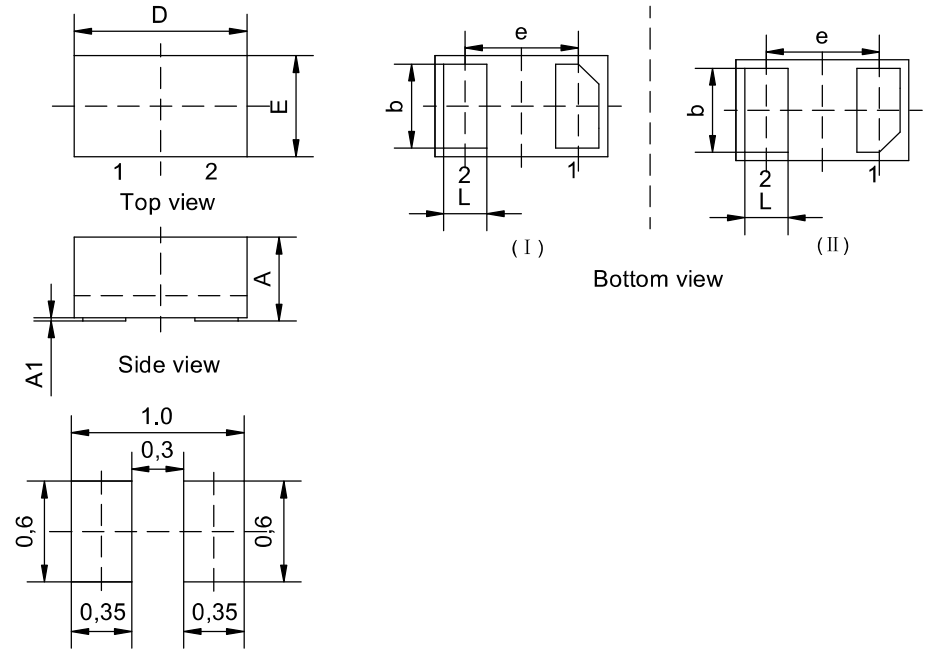






Package Mechanical Data

DFN1006-2L



Recommended soldering footprint(mm)

Symbol	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	0.40	0.50	0.55	0.016	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65BSC			0.026BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.20	0.25	0.30	0.008	0.010	0.012