

General description

General Application Schottky barrier rectifier, encapsulated in a DFN1006-2L leadless ultra small Surface-Mounted Device (SMD) plastic package.

Features and benefits

- Average forward current: $I_F(AV) \leq 1.0A$
- Reverse voltage: $V_R \leq 40 V$
- Low forward voltage: $V_F \leq 0.6V @1A$
- Low reverse current: $I_R \leq 10\mu A@40V$
- Leadless ultra small SMD plastic package



DFN1006-2L

Application information

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch mode power supply
- Low power consumption applications
- Ultra high-speed switching
- LED backlight for mobile application

Ordering information

Device	Package	Reel Size	Qty(PCS)
MBR4010BS	DFN1006-2L	7 Inch	10000

Ordering information

Marking	Naming rule	Graphic symbol
4A	MBR4010BS 产品名称 product name	

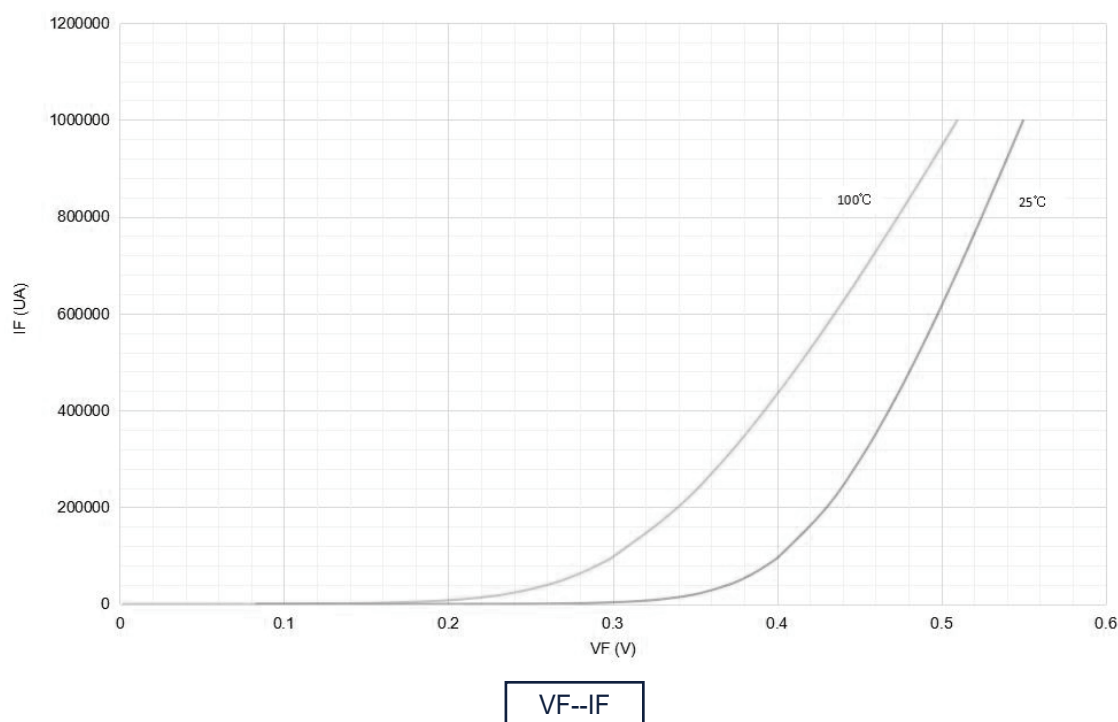
Maximum Ratings ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
Average rectified forward current	$I_{F(AV)}$	1.0	A
Forward current surge peak(@8.0mS)	I_{FSM}	7.0	A
Power Dissipation	P_D	0.6	W
Junction temperature	T_j	125	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^{\circ}\text{C}$

Electrical Characteristics ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

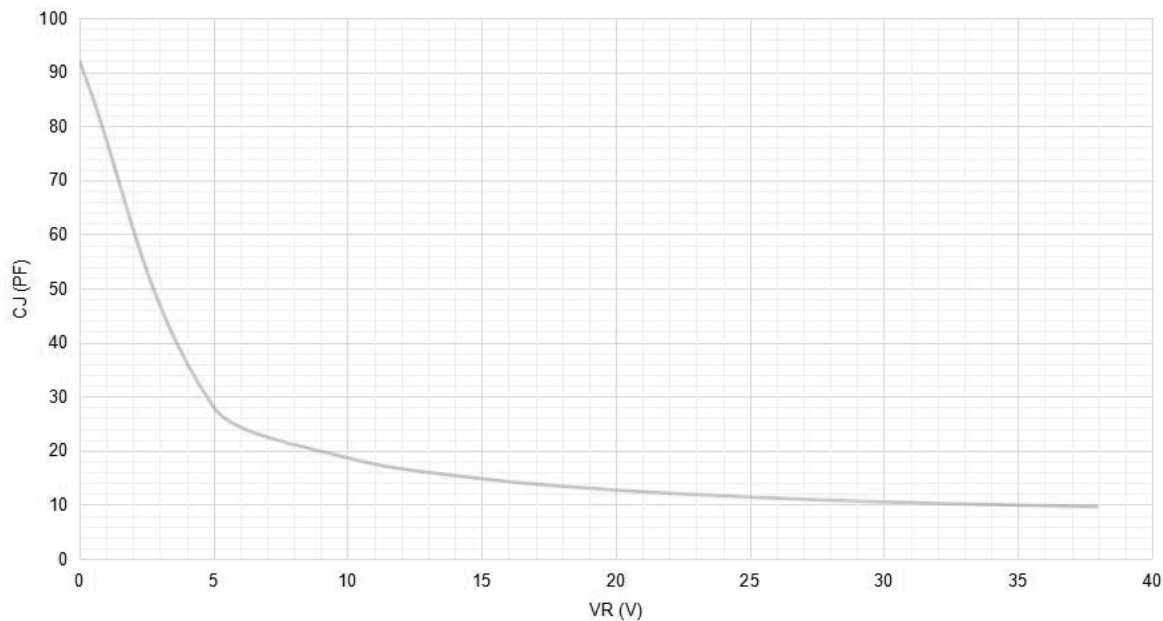
Parameter	Symbol	Min	Typ	Max	Unit	Condition
Forward voltage	V_F	--	--	0.42	V	($I_F=0.1\text{A}$)
		--	--	0.60	V	($I_F=1.0\text{A}$)
Reverse current	I_R	--	--	10	μA	$V_R=40\text{V}$
Capacitance between terminals	C_T	--	92	--	pF	$V_R=0\text{V}, f=1\text{MHz}$

Typical Characteristics

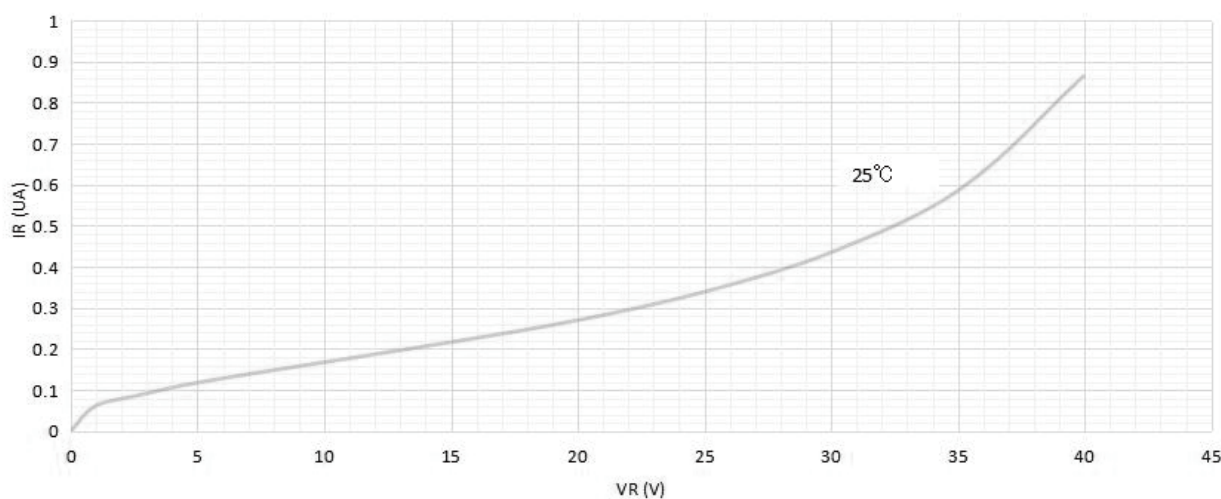




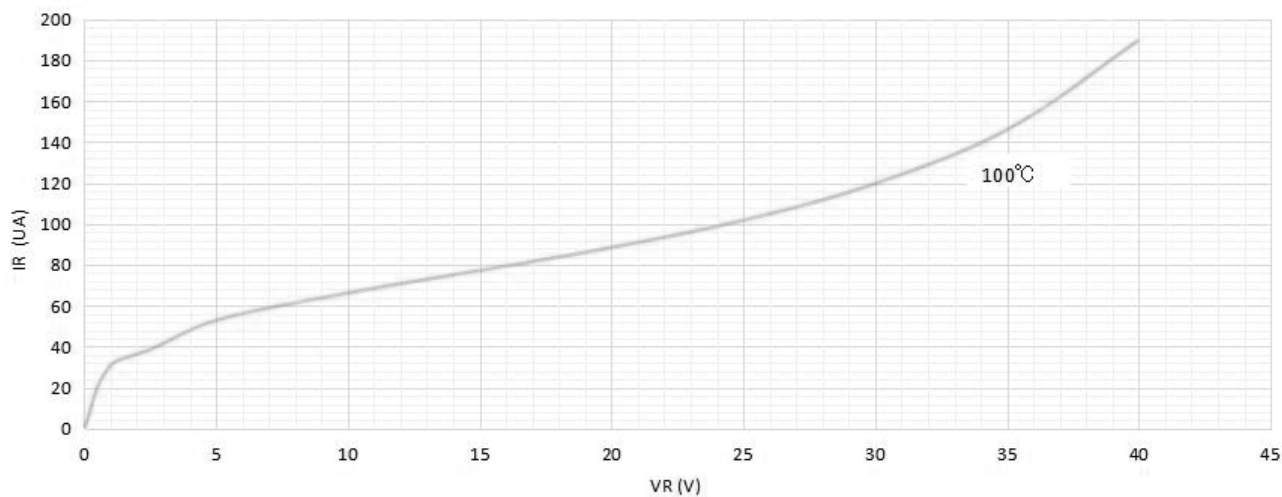
Typical Characteristics



VR--CJ

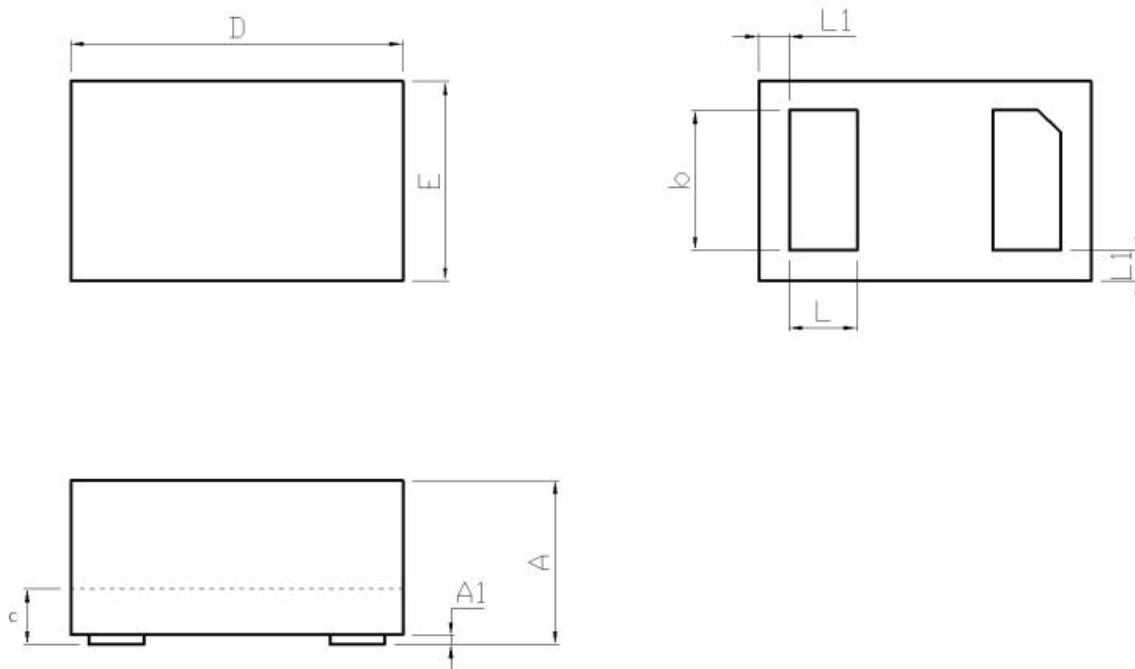


VR--IR (25°C)



VF--IR (100°C)

DFN1006-2L Package Outline Dimensions



DFN1006-2L (mm)			
DIM	MIN	TYP.	MAX
A	0.40	0.50	0.55
A1	0	0.02	0.05
b	0.45	0.5	0.55
c	0.1	0.15	0.18
D	0.95	1.00	1.05
E	0.55	0.60	0.65
L	0.20	0.25	0.30