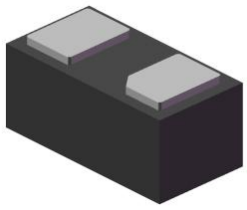
Technical Data
Data Sheet N2564 REV.-

MBR4010D1-A SURFACE MOUNT SCHOTTKY BARRIER DIODE



DFN1006-2L

Features

- Low current rectification
- Low forward voltage
- ROHS Compliant
- "-A" is an AEC-Q101 qualified device
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration

Mechanical Characteristics

- Case: DFN1006-2L, Molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
Average Forward Current	$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	5	A
Power Dissipation	P_D	250	mW
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125	°C

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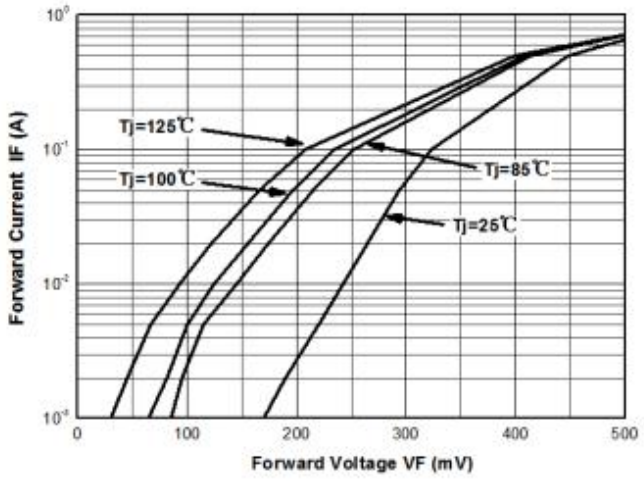
Electrical Characteristics @T_A=25°C unless otherwise specified

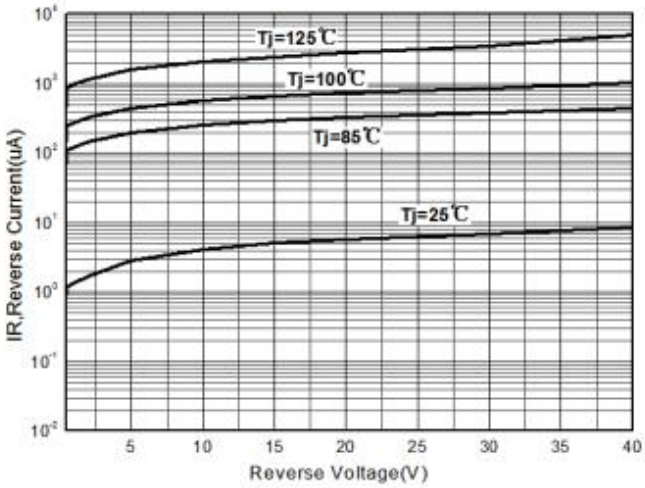
Characteristics	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	@I_R=100uA	40			V
Forward Voltage Drop*	V_{F1}	@ 100mA, Pulse, T_J = 25 °C @ 500mA, Pulse, T_J = 25 °C @ 700mA, Pulse, T_J = 25 °C @ 1A, Pulse, T_J = 25 °C			0.39 0.50 0.55 0.60	V
Reverse Current*	I_{R1}	@V_R = 10V, Pulse, T_J = 25 °C @V_R = 40V, Pulse, T_J =25 °C			30 100	μA

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves



Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics

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Ordering Information

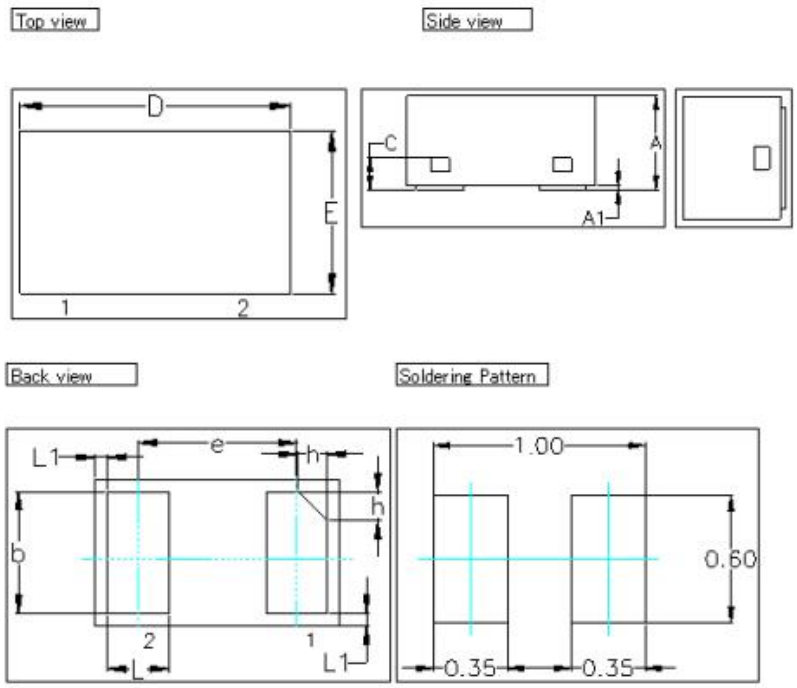
Device	Package	Shipping
MBR4010D1-A	DFN1006-2L	10000pcs/ reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

R4 = Marking Code

Mechanical Dimensions DFN1006-2L(Millimeters)



SYMBOL	Millimeters		
	Normal	MIN.	MAX.
A	0.500	0.450	0.550
A1	0.020	0	0.050
b	0.500	0.450	0.550
C	0.15	0.12	0.18
D	1.000	0.950	1.050
e	0.600 BSC		
E	0.600	0.550	0.650
b	0.500	0.450	0.550
L	0.250	0.200	0.300
L1	0.050 REF		
h	0.12	0.07	0.17

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