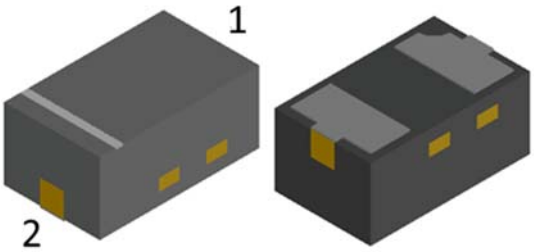
Small Signal Schottky Diode





Features

- Moisture sensitivity level 3
- Reverse voltage：40V
- Average forward current：1A

Application

- High frequency and low voltage rectifier

Mechanical data

- **Package**：DFN1006-2L
- **Terminals**：Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (T_a=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			R4
Repetitive peak reverse voltage	V_{RRM}	V	40
Forward current	I_F	A	1
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	3
Repetitive Peak Forward Current@ tp=1ms，δ=0.25	I_{FRM}	A	1.5
Power dissipation	P_D	mW	200
Junction temperature	T_J	℃	-55 to +150
Storage temperature	T_{STG}	℃	-55 to +150

■ Electrical Characteristics (Ta=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	I_R= 100uA	40		
Forward voltage	V_{F1}	V	I_F=0.1A			0.38
	V_{F2}	V	I_F=0.2A			0.42
	V_{F3}	V	I_F=0.5A			0.49
	V_{F4}	V	I_F=0.7A			0.55
	V_{F5}	V	I_F=1A			0.61
Reverse voltage leakage current	I_{R1}	uA	V_R=10V			30
	I_{R2}	uA	V_R=40V			40

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	℃/W	625
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	℃/W	500

Note:

（1）Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 17mm*10mm copper pad areas

■Characteristics

Fig 1：P_D-Ta Curve

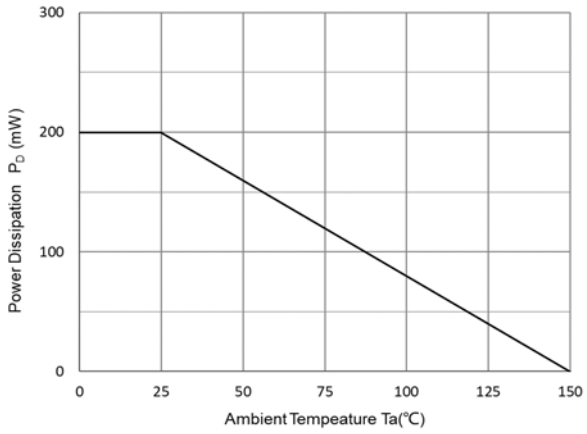


Fig 2：Capacitance Capability

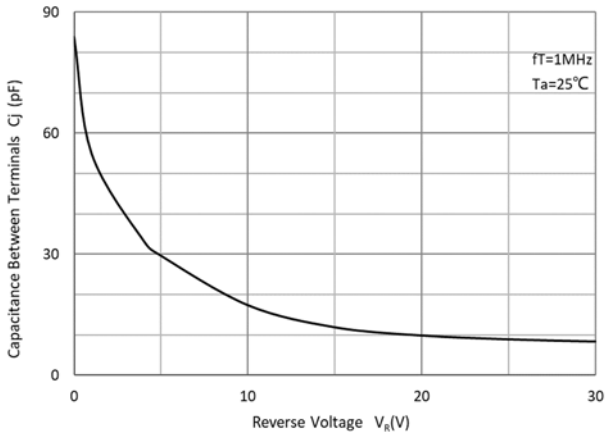


Fig 3：Typical Forward Characteristics

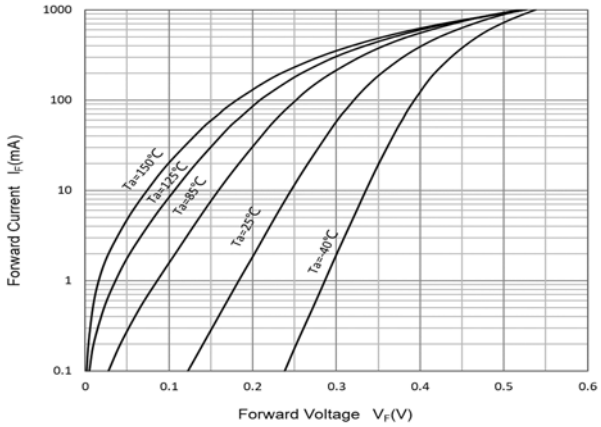
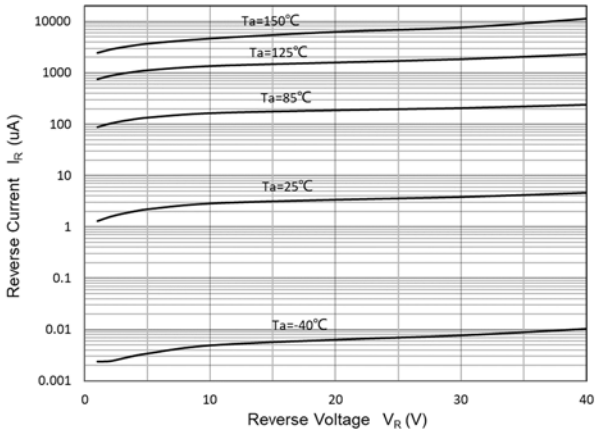


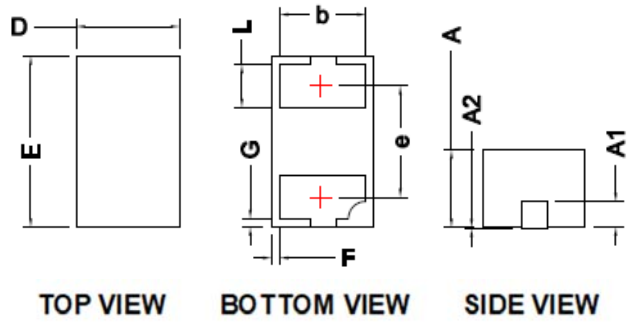
Fig 4：Typical Reverse Characteristics



■Ordering Information

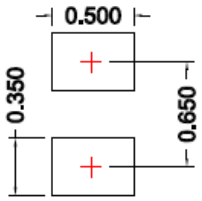
Preferred P/N	Packing code	Unit weight(mg)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
MBR1040L2	F1	Approximate 0.9	10000	100000	400000	Tape & Reel

■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	0.50	0.60	0.70
E	0.90	1.00	1.10
A	0.35	0.45	0.55
A1		0.15 BSC	
A2			0.10
F	0.005		
G	0.005		
L	0.15	0.25	0.35
b	0.41	0.50	0.59
e		0.65 BSC	

■ Suggested Pad Layout



UNIT: mm

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