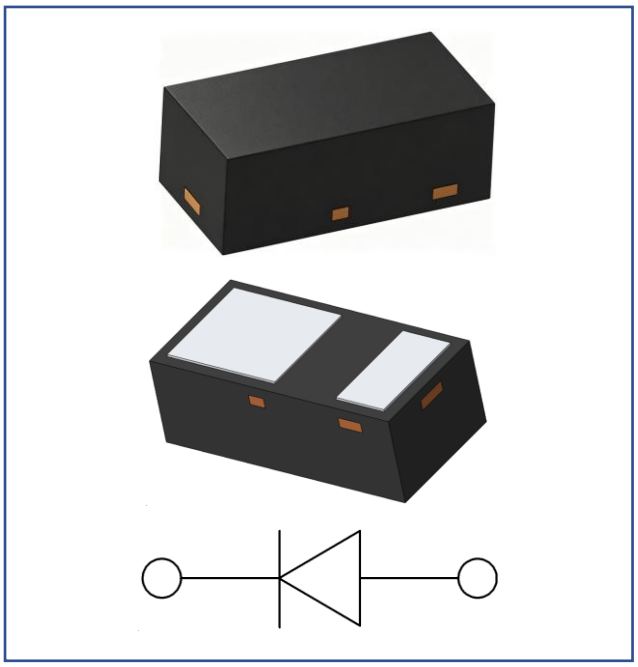
Schottky Barrier Diode



Features

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

Application

- Fast switching speed
- For general purpose switching applications

Mechanical data

- **Package**: DFN1608-2L
- **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			R
Repetitive peak reverse voltage	V_{RRM}	V	40
Forward current	I_F	A	1
Repetitive peak forward current @ tp ≤ 1 ms; δ ≤ 0.25	I_{FRM}	A	3
Non-Repetitive Surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	6
Power Dissipation	P_D	mW	410
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=10uA	40		
Forward Voltage	V_F	mV	I_F=100mA			390
			I_F=500mA			500
			I_F=700mA			550
			I_F=1A			600
Reverse Leakage Current	I_R	uA	V_R=10V			4
			V_R=40V			20
Capacitance	C	pF	V_R=1V,f=1MHz			60
			V_R=10V,f=1MHz			25
Reverse Recovery Time	Trr	ns	I_F=I_R=0.5A, Irr=0.1A		15	25

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	RθJ-A(1)	℃/W	245
Thermal resistance, junction-to-case	RθJ-C(1)	℃/W	200

Note:

（1）Device mounted on PCB, single-sided copper, with standard footprint

■Characteristics

Fig 1：P_D-Ta Curve

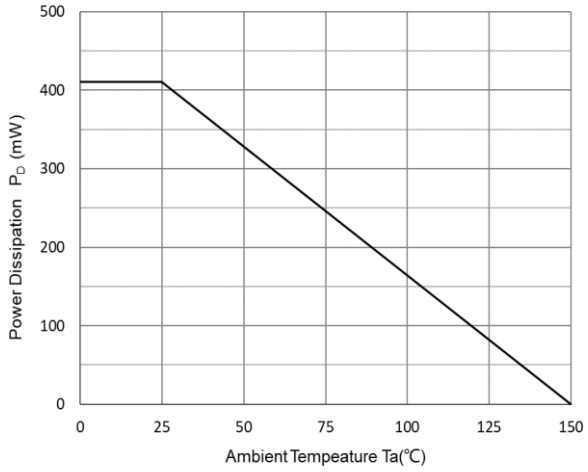


Fig 2：Capacitance Capability

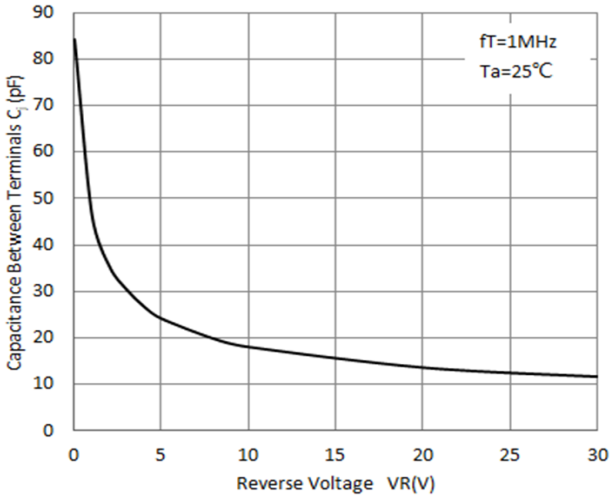


Fig 3：Typical Forward Characteristics

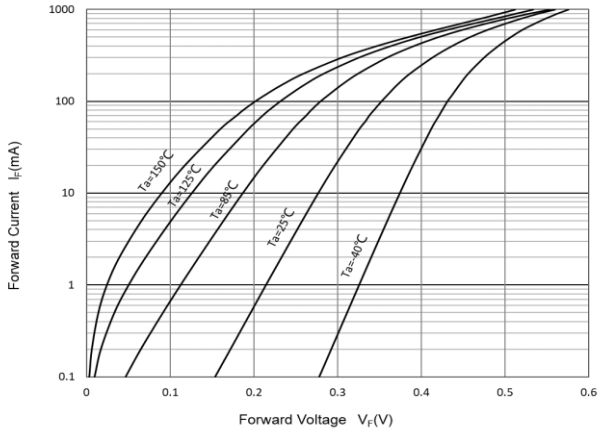
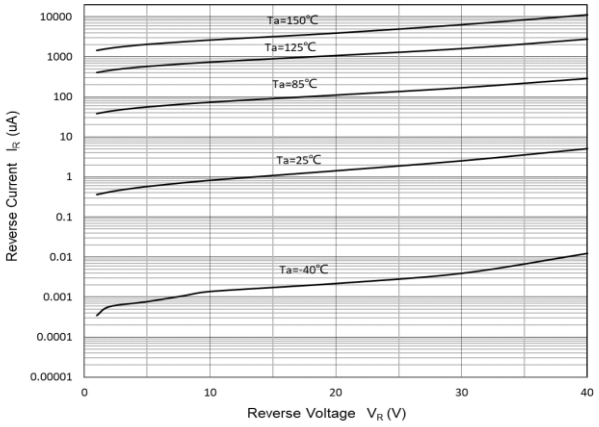


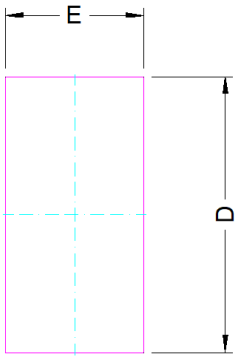
Fig 4：Typical Reverse Characteristics



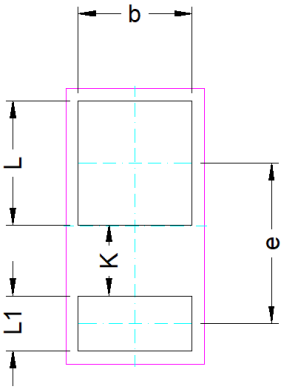
■Ordering Information

Prefered P/N	Packing Code	Unit Weight(g)	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MBR1040THG	F1	Approximate 0.0026	3000	30000	120000	Tape & Reel

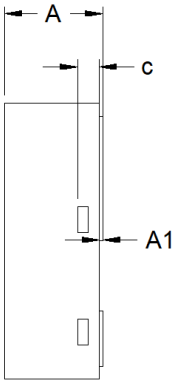
■ Outline Dimensions



Top View



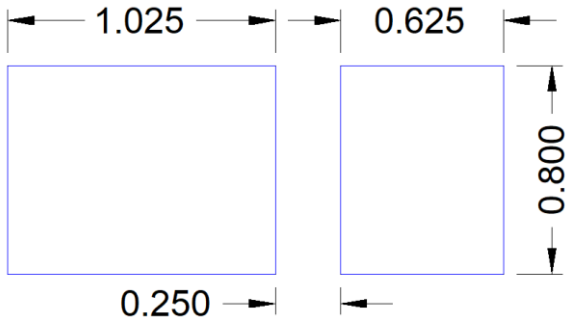
Bottom View



Side View

Symbol	MILLIMETER		
	MIN	NOM	MAX
D	1.50	1.60	1.70
E	0.70	0.80	0.90
A	0.35	0.45	0.55
c		0.15 BSC	
A1	0		0.10
b	0.56	0.66	0.76
L	0.62	0.72	0.82
L1	0.22	0.32	0.42
k		0.41 BCS	
e		0.93 BCS	

■ Suggested Pad Layout



UNIT: mm

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