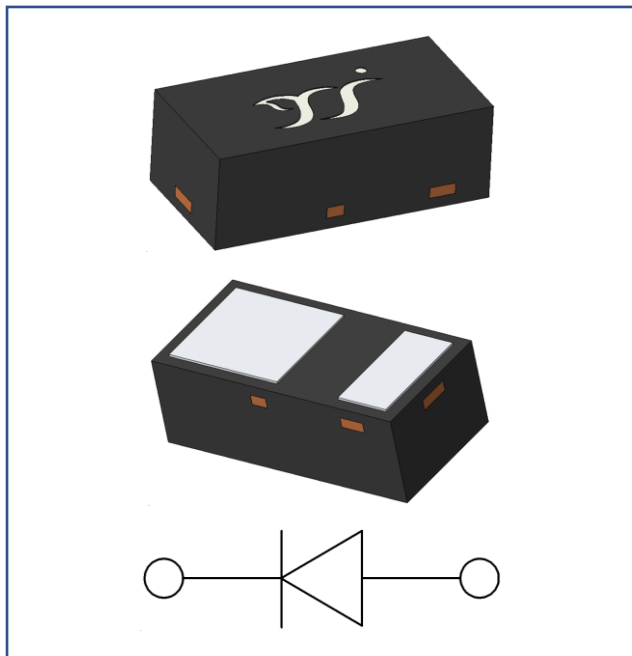


Schottky Barrier Diode



Features

- Moisture sensitivity level 1
- Reverse voltage: 40V
- Average forward current: 2A

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 ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			2R
Repetitive peak reverse voltage	V_{RRM}	V	40
Forward current	I_F	A	2
Non-Repetitive Surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	10
Power Dissipation	P_D	mW	200
Junction temperature	T_J	$^{\circ}\text{C}$	-55 to +150
Storage temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150



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■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V _R	V	I _R =100uA	40		
Forward Voltage	V _F	mV	I _F =100mA			380
			I _F =500mA			480
			I _F =1A			550
			I _F =2A			660
Reverse Leakage Current	I _R	uA	V _R =10V			5
			V _R =40V			30
Capacitance	C	pF	V _R =1V,f=1MHz			90
			V _R =10V,f=1MHz			40

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{θJ-A} ⁽¹⁾	°C/W	500
Thermal resistance, junction-to-case	R _{θJ-C} ⁽¹⁾	°C/W	400

Note:

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



MBR2040THG

■ Characteristics

Fig 1: P_D - T_a Curve

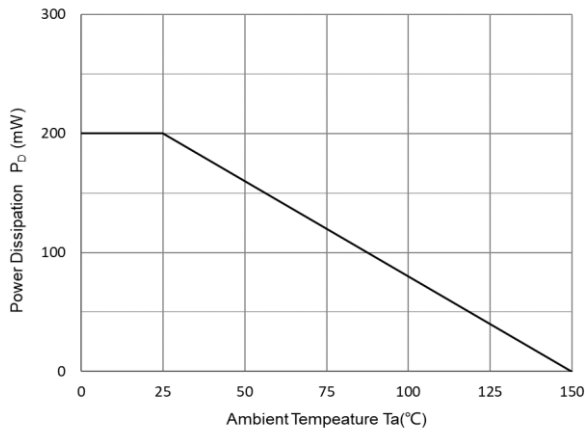


Fig 2: Capacitance Capability

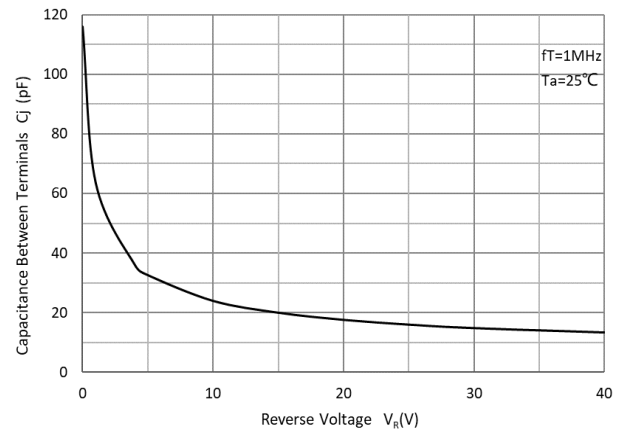


Fig 3: Typical Forward Characteristics

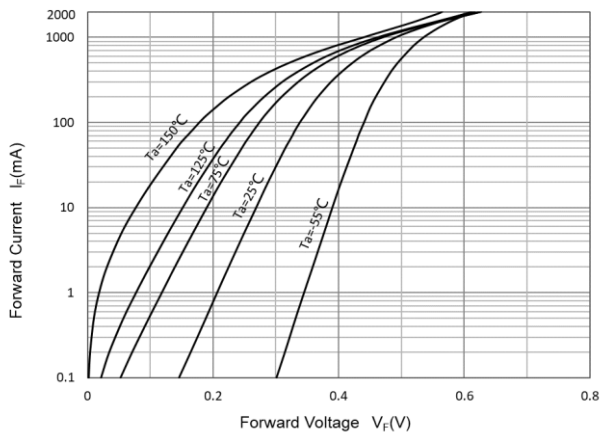
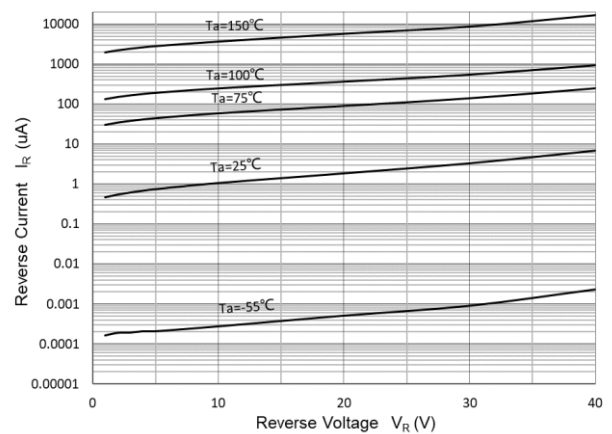


Fig 4: Typical Reverse Characteristics



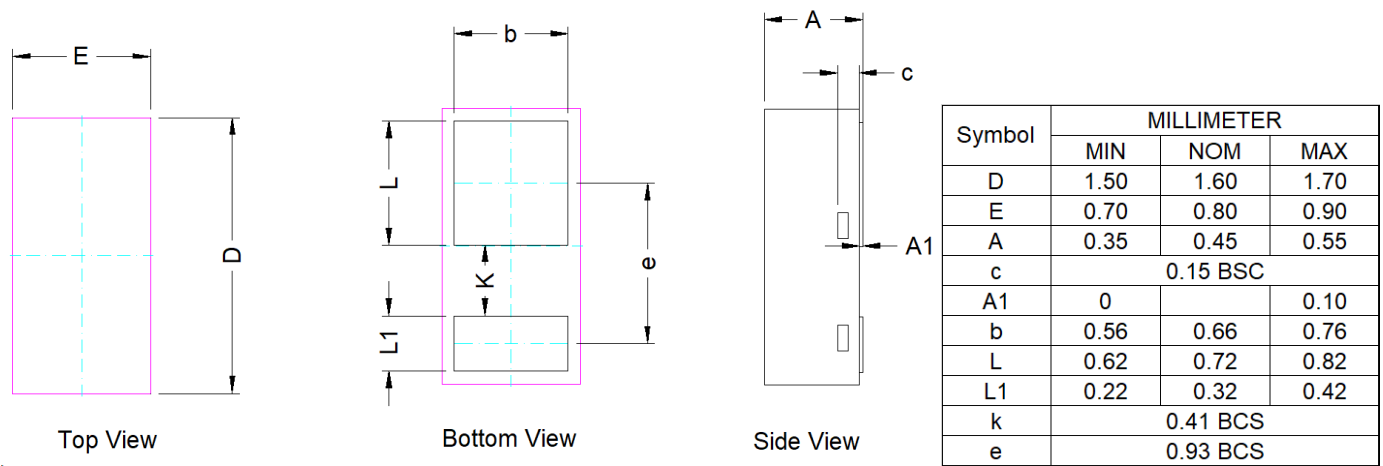


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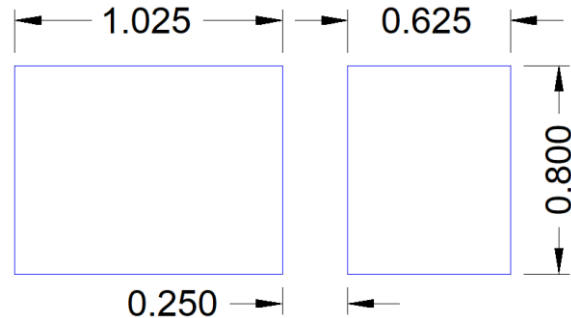
■ Ordering Information

Prefered P/N	Packing Code	Unit Weight(g)	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MBR2040THG	F1	Approximate 0.0026	3000	30000	120000	Tape & Reel

■ Outline Dimensions



■ Suggested Pad Layout



UNIT: mm



MBR2040THG

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