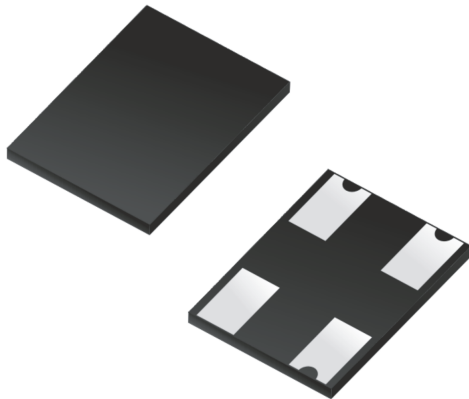




FEATURES:

- Reverse Voltage - 650V
- Forward Current - 8.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: DFN1080
- Terminals: Solderable per MIL-STD-750, Method 2026

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	LNB08MD18	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	650	V
Maximum RMS voltage	V_{RMS}	455	V
Maximum DC Blocking Voltage	V_{DC}	650	V
Average Rectified Output Current	I_O	8.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	180	A
I^2t Rating for Fusing $t=8.3ms$	I^2t	134	A ² S
Maximum Forward Voltage Per Diode at 4.0 A	V_F	1.0	V
Maximum DC Reverse Current @ $T_A=25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^{\circ}\text{C}$	I_R	5 100	μA
Typical Junction Capacitance (Note1)	C_j	45	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	45 13 10	$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×3.81cm×3.81cm copper pad.

Fig.1 Average Rectified Output Current Derating Curve

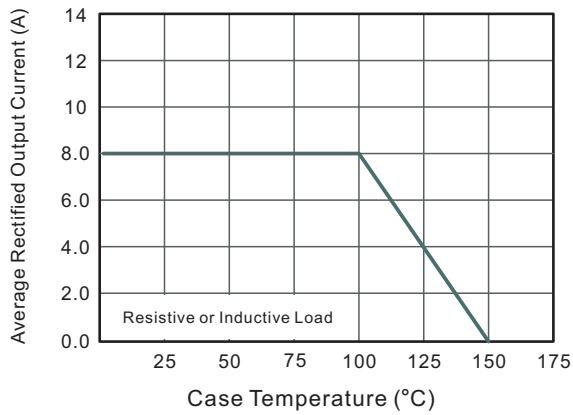


Fig.2 Typical Reverse Characteristics

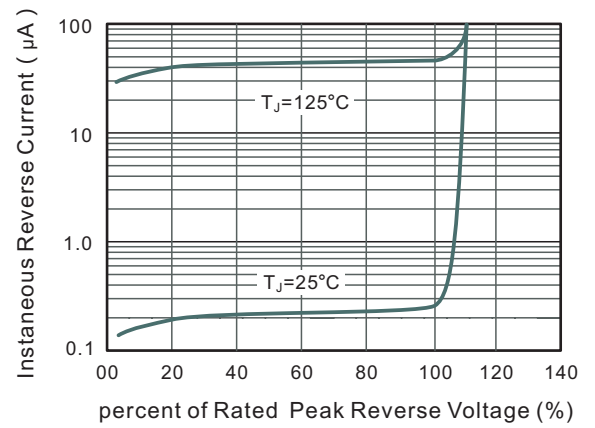


Fig.3 Typical Instantaneous Forward Characteristics

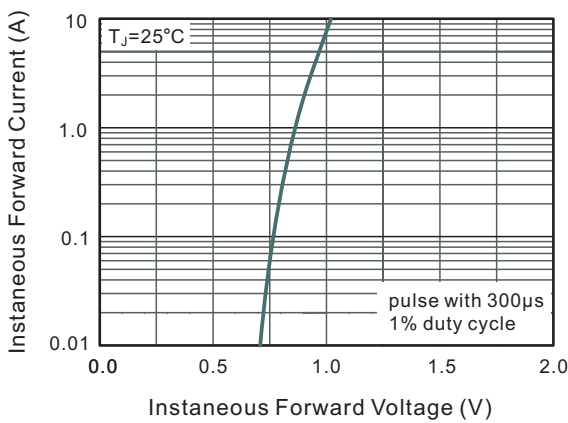


Fig.4 Typical Junction Capacitance

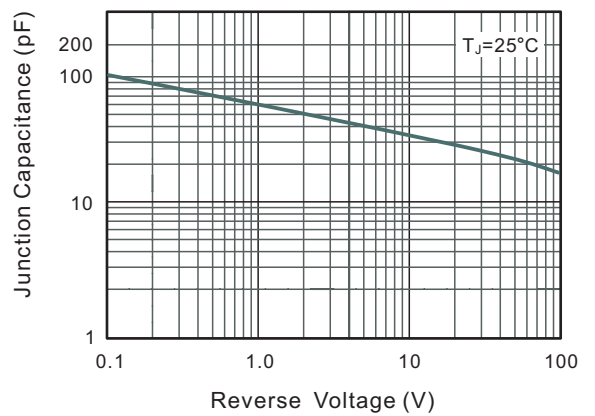
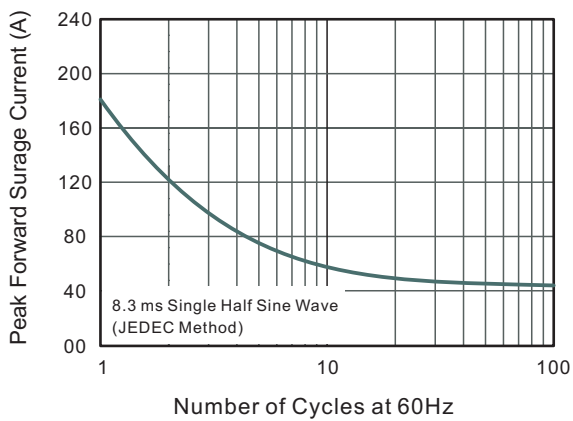
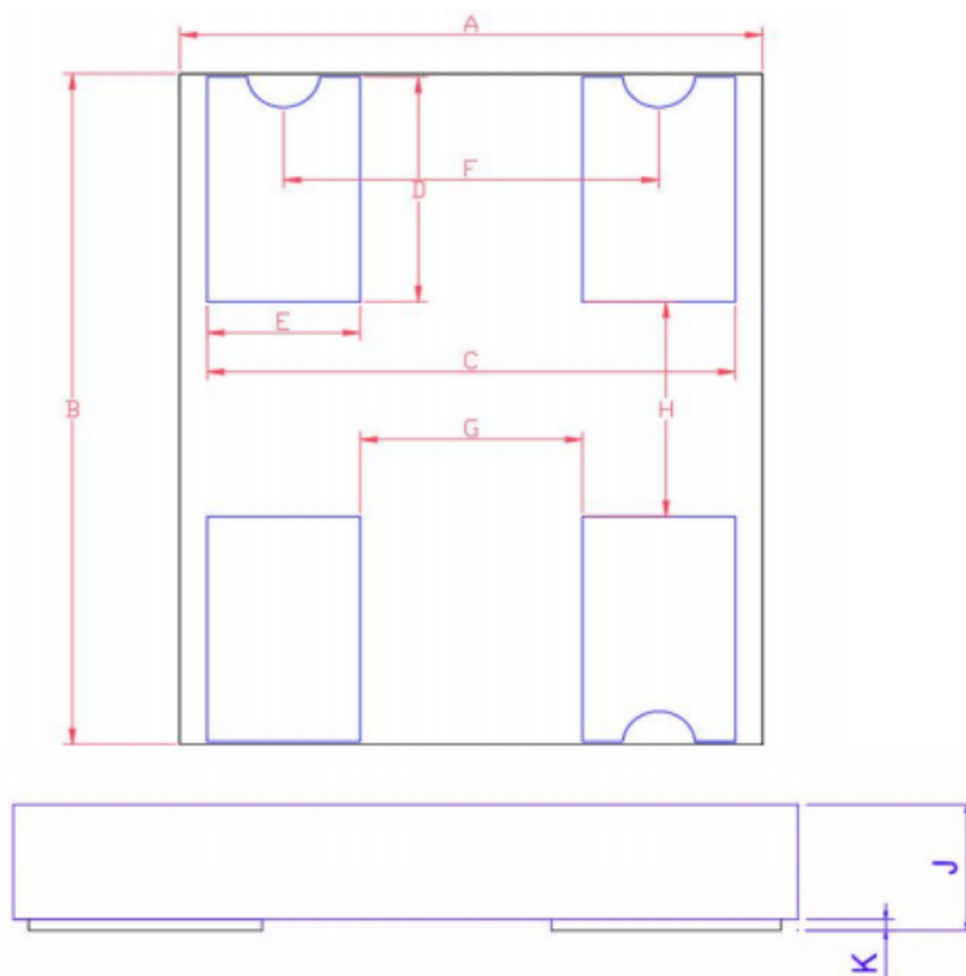


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE



Unit:mm

DIM	MIN	NOR	MAX
A	7.8	8	8.2
B	9.8	10	10.2
C	7.1	7.25	7.4
D	3.3	3.4	3.5
E	2	2.1	2.2
F	5.1	5.2	5.3
G	2.9	2.95	3
H	3.2	3.25	3.3
J	1.00	1.10	1.20
K	0.04	0.05	0.07